13: Beaglehole & Beaglehole E-5 (1938-1939) 1941
OU9 Tonga OU9
Vavau
Pangai

precise accuracy.[33] What is needed in this connection is the development of some techniques whereby the student of contemporary primitive cultures could express an index of acculturation that would state concisely and adequately the cultural level of the culture studied. This index would then constitute a simplified way of describing the position of the culture in question on an imaginary line whose polar limits would be aboriginal culture at one end and western European culture at the other end. If it were possible to establish such an index-expression for the various contemporary Polynesian cultures, we would have gone far in our understanding of what is meant by the processes of acculturation and culture change. This index might express theoretically either the number of aboriginal elements surviving in the present-day culture or else the number of new elements transferred from the carriers of the alien culture. This index-expression of the status of contemporary culture together with complete knowledge of the temporal order in which various elements of culture have been transferred from alien to aboriginal culture would then open the way for a more realistic attack upon the dynamics of the processes underlying the diffusion of culture.

[33] For a brief consideration of the number and kind of cultural elements borrowed by the Tongans from western European culture, reference may be made to Gifford, E. W., "Euro-American Acculturation in Tonga," *Journal of the Polynesian Society*, 33, 1924, 281-292. This survey of Gifford applies to Tonga as a whole, particularly perhaps to present-day Tongan culture as carried by the Tongans of Nukualofa, the capital. Many of the changes listed by Gifford obviously do not apply to small commoner-villages, as for instance, use of water-closets, automobiles, horse and cart, telephones, motion-pictures, typewriters, addiction to horse-racing and the like. Still other of the changes refer almost exclusively to the life of the chiefly class. References to the functioning of Christianity with its commandments *(tapu)*, the use of writing, and customs relating to tobacco-smoking, and eating, apply with fair accuracy to the culture of Pangai village. When compared with village culture, Gifford's paper has some theoretical significance, however, in that it describes the results of culture-contact for the urban Tongan as opposed to the village Tongan. It thus gives insight into the dynamics of contemporary culture-change among two types of Tongan community. Reference may be made in this connection to the methodological discussion in Redfield, R., *Tepotzlan, A Mexican Village*, Chicago, 1930, and the orientation to culture-contact among the Hawaiians in Beaglehole, E., *Some Modern Hawaiians*, University of Hawaii, Res. Bull. 19, Honolulu, 1939, 7-11.

herself. With faith in her identity, she has consistently remained determined to maintain the freedom to run her own affairs. She has, in effect, held the reins for designing and controlling her own future.

Yet, today's world presents threats which differ greatly from the threats which have prevailed throughout history – threats which Tonga has successfully withstood. A country's integrity is her stronghold, and it is Tonga's integrity which is being challenged by the diverse forces of a world where material progress, technological know-how, wealth and power hold prominence over human values.

The mushrooming in Tonga of phenomena such

[p. 53-C]

[TEXT CONTINUED ON PAGE54B]

181 as tourism, foreign economic interest, prices of
178 consumer goods, pressures to work and study
457 abroad, and the rural-urban drift which is creating
435 grave unemployment and population problems on
Tongatapu, intensifies the dilemma of *how to*
369 *improve the quality of life while preventing cultural*
464 *and social deterioration.*

Although Tonga's economy is based primarily on
433 agriculture (main exports: copra, bananas,
241 desiccated coconuts), Tonga is slowly moving away
from being a society of substantially subsistence
433 farming. Tourism, which is rapidly becoming a
major consumer industry, is being encouraged by
457 the government as a source of employment and

[p. 54-B]

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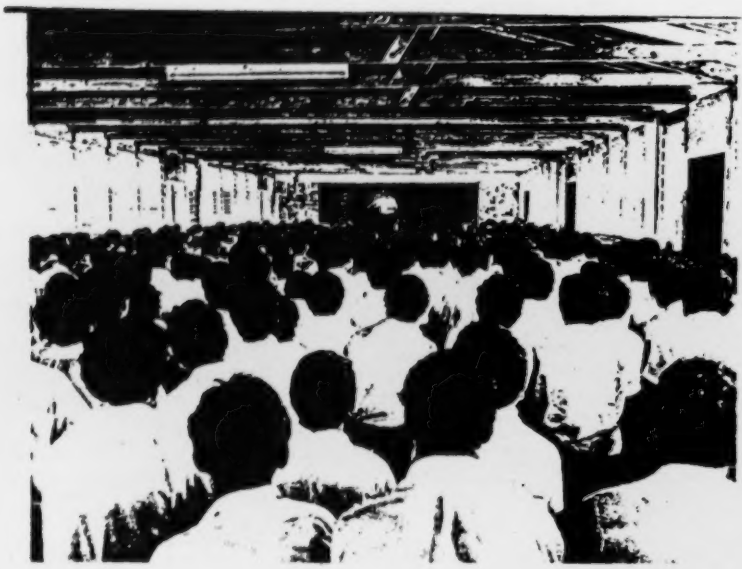

Population is becoming a major problem. There are approximately 92,000 people in Tonga; however, distribution is very uneven, for more than half are now living on the rapidly urbanizing island of Tongatapu—many having moved from outer islands in search of better employment or educational opportunities. Photo above is at St. Andrew's (Anglican) School in Nuku'alofa. At right is a family planning poster which, in essence, reads: *"I love children, but not one after another!" What can you do? Inquire at the Family Planning Office.*

Kuo kamata ke fu'u tokolahi 'a Tonga. 'Oku fe'unga mo e toko 92,000 he taimi ni, pea 'oku laka hake 'i he vahe ua 'a e kakai 'oku nofo 'i Tongatapu. Lahi foki e hiki ki ai mei he ngaahi 'otu motu kehe koe'uhi ko e kumi ngaue pe ko e fie ma'u ha ako lelei ange. Ko e 'Apiako 'Inglani (St. Andrews) e 'oku ha'i olunga, pea ko e akonaki e ki he fakakaukau'i famili 'i to'omata'u.

39: Gerstle & Raitt C,Q-4,5 (1952-1972) 1974 OU9 Tonga OU9

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With increasing urbanization, many people in Tonga's capital city are finding themselves too busy to grow their own food. Thus, an average day at *Talamahu* ("to tell of plenty") *Market* finds people bustling about buying papayas, taro, coconuts, bananas, vegetables, weaving materials and other items brought from farm lands outside the urban setting.

'Alu pe e fakataka mo e si'isi'i e taimi 'o e kakai ke toe fai ha ngoue. Ko e ongo ta eni 'o e fakatau me'akai 'i he Maketi Talamahu.

39: Gerstle & Raitt C,Q-4,5 (1952-1972) 1974 OU9 Tonga OU9

949
443
458
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415

[caption is on p.72]

[p.73]

49: Rogers A-4,5 (no date), 1969 OU9 Tonga OU9

would be more likely to succeed on government than on noble estates, and only, of course, in areas where land is available for lease. There is evidence in Tongatapu that some banana-producing cooperatives have achieved success by using vacant land and employing tractors.

A third alternative for landless men is migration, and the 1966 census shows in a number of ways that ". . . the Tongan population has become mobile, both internally and externally . . . the drift of young people from the atolls of Ha'apai especially and rural areas of Tongatapu to Nuku'alofa is probably indicative of this trend" (p. 11).

Tonga now has thirteen towns and villages each with a population of more than one thousand people; nine of these are situated on Tongatapu island whereas the Ha'apai and Vava'u groups contain only two each. These thirteen towns and villages showed a combined percentage increase of population of 48.3% during the intercensal period, although the two Ha'apai towns combined actually lost population over this period. Population growth in the nine Tongatapu towns and villages ranged from 34.0% to nearly 357.0% (Haveluloto) for the decade from 1956; Nuku'alofa and suburbs (historically three villages) increased over the same period by 6,483 persons (by 70.0%) to a total of 15,685.

Nearly 32.0% of all persons over sixteen living in Tongatapu on the night of the census were born in other parts of the Kingdom, with 14.4% deriving from Ha'apai and 11.4% from the Vava'u group. Some of these people living away from the place where they were born were undoubtedly students and temporary residents from the northern islands, but differential rates of increase for Tongatapu (53.2% during the intercensal period) and the Ha'apai group (6.78%) suggest that there is a higher rate of internal migration than could be explained simply by students and visitors. Walsh has described the process whereby temporary immigrants become permanent residents.[12]

Some imbalance between the sexes is apparent in Tongatapu's excess of males "born elsewhere" over females "born elsewhere". Supporting the argument that many of Tongatapu's immigrants derive from Ha'apai, is the evidence that there is a shortage of males in that group; there are only 491 males per 1,000 persons in the Ha'apai district—the only deviation from the national pattern of male predominance.

* * *

The average age for marriage has increased since 1956 when over 3.0% of all men and over 9.0% of all women were married in the fifteen to nineteen age-group. The 1966 returns indicate that only about 1.0% of the total male population and just over 7.0% of the total female population in this cohort were married. It is possible that some of the reasons for this delay in marriage are the shortage of land in rural areas, the excess of men in urban areas, the increasing cost of traditional weddings, the shortage of and desire for wage employment and money, and the enormous advantage post-primary education gives to obtaining wage employment.

12. Walsh 1967:14.

49: Rogers A-4,5 (no date) 1969 OU9 Tonga OU9

building small dwellings near the main dwelling for siblings of the opposite sex, parents, and married members of the same family.

The need to step up the rate of industrialisation is shown by the beginning of land shortages, the increase of adult "landless" men, the indirect evidence of under-employment throughout the Kingdom, and the movement of increasing numbers of rural dwellers to urban centres, especially to Nuku'alofa.

The most spectacular development in Tonga since 1956 has been the acquisition of a national shipping fleet. Before that date, two motorized sailing ketches were the principal means of inter-island transport; all fuel was imported from Fiji in 44-gallon drums. The progressive, far-sighted administration ordered the first vessel, *Aoniu* (514 tons), in 1956; it was delivered in 1958 and by 1960 it had made a gross earning of £T68,120 with net profits of £T13,970 after providing for depreciation and other running expenses. The Tongan fleet now comprises seven vessels, with the largest, *Niuvakai* (1,800 tons), plying between Sydney Australia, Japan, Fiji, and Tonga. Although great savings are now made each year on freights to and from the Kingdom, the shipping line has, however, done little to relieve the need for more jobs in Tonga. Raw materials could be transported to the Kingdom by these ships to provide employment in selected (possibly labour intensive) industries. If European and Australasian governments do not take the initiative by offering experts for this purpose it is likely that trade and aid may be forthcoming from Asia, especially from Japan.

Tonga has also shown how a state-owned industry can provide a large degree of independence for a small nation. The Tonga Copra Board and allied government agencies started with improving the quality of export copra, and now, with the aid of British finance, have launched a highly successful Coconut Replanting Scheme throughout the land. Government industries have already been discussed. Philatelic and numismatic sales are still being fully exploited by the Minister of Finance.

Nevertheless, economic growth, although spectacular for a country using mainly its own limited resources, is not fast enough to cater for the demand for wage labour. While the population continues to increase at the present rate, the need for the expansion of wage labour, either on the land or in industries, will persist.

Finally, economic expansion and industrialization is not by itself a panacea for the pressures and problems besetting this tiny island Kingdom; techniques will need to be changed, social privileges equalised, and human resources marshalled and developed, especially in the fields of education and vocational training. Education for white collar jobs carries greater prestige, but efficient production of export crops may be more lucrative for the individual.

At present, compulsory primary schooling ends at standard IV, a class reached by many children at the age of ten. Intermediate and secondary schooling is not compulsory, so if primary school pupils do not gain a place in one of the few secondary schools they repeat the last year in the primary school once or even twice. Because of this an enormous percentage

66: Walsh K-5 (1963-1964) 1969 OU9 Tonga OU9
Nuku'alofa

a tongan urban peasantry conjecture or reality?

A.C.Walsh

369 171 Of the capital towns of the South Pacific, Nuku'alofa is probably the least urban and its way of life the least different from that of the rural villages. It differs from other Pacific island capitals in several basic characteristics. Unlike other Pacific port towns it is largely the product of Tongan enterprise and cannot for this reason be considered in the same light as Belshaw's "artificial colonial-parasitic" town.[1] Nuku'alofa is overwhelmingly Tongan in population and outlook and Tongans predominate in all branches of the economy.[2] It is the modern capital of a society that in pre-European times was the most highly stratified in western Polynesia and much evidence remains of this today.[3] It has little feeling of corporate unity, there is no ownership or sale of land and within the town there are few spatial differences or evidence of specialisation. There is very little secondary industry, private or foreign tertiary activity, and its migrant population as a whole is less attracted by job opportunities than in many other Pacific island towns. It is therefore doubtful whether Nuku'alofa, as claimed by Belshaw for other Pacific port towns, can be construed as "a vast agency for cultural change".[4] 369 Its inhabitants meet few of the challenges which an urban environment extends and most rural and Tongan attitudes are carried over into the town where they require little or no modification.

Spillius, writing of Nuku'alofa from the viewpoint of public health, wrote that "the distinction between rural and urban is an artificial one in Tonga ... a better definition of the larger towns of the kingdom is large overcrowded villages."[5] Yet, by virtue of its

size and its social and economic functions, Nuku'alofa cannot be regarded merely as an overgrown village. The South Pacific Commission, recognising the difficulties in defining the term "urban" in the South Pacific area, proposed three characteristics typical of Pacific urban settlements. A heavier concentration of population, an occupational structure involving a larger proportion in non-agricultural pursuits, and a form of government suited to the needs of the town.[6] Nuku'alofa meets the first two characteristics and, by being the centre of all Tongan administration, must be considered as different from other settlements in Tonga even though it possesses no government peculiar to itself.[7] As the capital of the kingdom it has several functions different from other towns in Tonga. It is the centre of administration, trade, commerce, church activities, education and other social services, the main port and the meeting ground for old and new, Tongan and foreign. Rural migrants form a large part of its population, its growth rate is much greater than almost all other settlements, it is considerably larger than any other town, and its inability to meet the problem of rapid inward migration is beginning to show in ways similar to urban areas outside Tonga where the same processes are at work. This is dramatically portrayed in a recent communique:

> "The prison is full and the court overworked. On the 16th of March more than a hundred young people were involved in violent fighting in the streets of Nuku'alofa. Several boys received cane knife wounds and over thirty are being charged in a special court today."[8]

Thus, while conditions and attitudes appear rural, Nuku'alofa must be classed, by Pacific standards, as an urban settlement.

urban characteristics

The emergence of Nuku'alofa as the future capital of Tonga can be traced from an early association with the Tu'i Kanokupolu line of high chiefs.* Later, during the period of civil wars (1799-1845), the previously dispersed Tongan settlements became nucleated villages for reasons of defence.[9] Subsequently the settlement became the main centre of Wesleyan Christianity and was chosen by the victorious Taufa'ahau (now King George I) as his permanent place of residence. It was from this time that the new village of Kolofo'ou (new town) emerged as the settlement of the king's followers, as distinct from the adjacent older settlement of Nuku'alofa which now assumed the name Kolomotu'a or old town. Ma'ufanga, the third distinct area of

* See glossary for all Tongan words used in text.

464 sale, and run a single-room grocery shop in his village...."[11] Classification is obviously even more difficult in Nuku'alofa where the opportunities for additional part-time or casual employment are 461 considerably greater. Thus in Nuku'alofa in 1956 a large number of 162 males were "employed" in agriculture (45 per cent) and secondary industry was relatively unimportant, absorbing only 7 per cent of the male work force (see Table II). Of the total work force 81 per cent were employed in tertiary work and a relatively large proportion of women were included in the total labour force (35 per cent). Further characteristics of the employment structure in Nuku'alofa were the dominant role of government and quasi-government produce boards in providing employment and initiating industrial development (at least one-quarter of the labour force so dependent),[12] the absence of a significant foreign private sector, the predominance of Tongans in all levels of employment, and the wide range of small-scale Tongan enterprises. In addition, much of this labour force, especially those classifying themselves agriculturalists, would be better considered underemployed and in many cases unemployed.

Table II

Male Employment in Nuku'alofa, 1956*

Employment	Percentage of those in Nuku'alofa	Percentage of those so employed in Tonga
Agriculture	45.7	10.2
Commodity Boards	5.5	57.6
Commerce (shops)	5.2	22.0
Transport & Communications	9.5	64.7
Services	19.9	26.0
Part-Manufacturing and Processing	6.8	33.4

Source: Sorting Cards, 1956 Census

* The male working age group was defined as 20-59 years. Over fifteen per cent of females in these age groups were in paid employment, representing 35 per cent of the total labour force.

464 The high proportion employed in agriculture demonstrates the
369 close links between Nuku'alofa and its rural hinterland. In this
[171] respect it probably has more in common with the classical nucleated village than with most port towns in other parts of the Pacific. Its occupational structure, however, differs greatly from rural villages in Tonga where almost all the males are at least primarily employed in agriculture.[13]

rural characteristics

To the air passenger wheeling over Nuku'alofa on the descent to Fua'amotu airport some ten miles distant, there would be no doubt that the town presents a rural appearance. It would be difficult for him to remember, even if he knew, that below was a town of some 18,000 people with an average population density in excess of the Suva urban area which he had left some three hours earlier. He would see the iron roofed buildings of the administrative and commercial core, but beyond this would recognise no functional specialisation. Many of the houses, small and thatch roofed, would be hidden among the trees. More visible would be the white coral sand of the graveyards, marking the earlier boundaries of the town's component villages. Closer inspection would confirm the observation by Spillius that 98 per cent of the population live in rural conditions.[14] There is no sewerage, reticulated water serves only key government areas and over half the population live in houses made at least in part of indigenous materials, often of traditional design. Towards the margins of the town the number of thatch and composite houses increases, as also does the percentage of migrants squatting on unconfirmed titles to land, and the involvement of agriculture. The town's boundaries, like its position in the rural-urban continuum, taper off slowly and only a broad transition area is distinguishable.

Land in Tonga is occupied on titles that trace their origin to the feudal days of the primitive nobility[15] and to early attempts by the first modern king and his missionary advisors to modify tradition to more closely resemble the system of tenure acceptable in Victorian England.[16] This blending of traditional and introduced, Tongan and Western, permeates almost every facet of Tongan life. It was consciously and deliberately introduced by a far-sighted monarch in an attempt to consolidate his position within a traditional framework and it served its function of perpetuating traditional content within a modified and apparently modern or western form.[17] Thus, all land belongs to the Crown and through it to the nobles and government in the form of hereditary estates or tofi'a. These tofi'a are subsequently divided into 'api kolo or town allotments and 'api tukuhau or country allotments and all male tax payers are legally entitled to a town and country allotment, although this right cannot always be exercised. The occupier has only a life interest though it is usually inherited according to stipulated laws of succession which favour the eldest son and the widow. The town dweller in this respect is in no way different from the country dweller. He is attached to the land and the ownership and direction of this land is of family concern. Its social significance is at least equal to its economic significance. Thus, although some two-thirds of the town's household heads were without registered 'api tukuhau in 1963, only one-fifth had no access

to the use of land. For every two householders with 'api tukuhau there was a further householder who was sharing land with a relation. The situation with regards to 'api kolo demonstrated the social significance of land still further—a third of the householders were sharing the 'api of relations.

Just as no village family could rely entirely on subsistence agriculture, few families in the town could rely entirely on wages. The town's economy, like the traditional peasant economy outlined by Franklin,[18] is labour and not capital intensive, kin relations serve a socio-economic role and there is a close attachment to the land. It would be erroneous to talk of per capita income in Tonga; the important consideration is family income. Although not entirely controlled by the head of the household as chef d'entreprise, the broad direction of spendings earned by members of a family is the concern of all the family, especially so in times of crisis or investment in education. And the families, though nuclear by residence, are extended in terms of mutual recognition of services and obligations.[19]

It would not be fakatonga, the right behaviour in terms of respect within Tongan society, to deny a relation access to land, residence, employment or a share in family success. If these are characteristics of a peasantry, one can only say that they are common to all of Tonga, rural and urban. Town dwellers are inescapably bound up with the land. They own it as much as villagers, they rely on it to supplement wages kept low on the assumption of an additional income from agriculture, they value it as a means of fulfilling family obligations and as a measure of their social importance and they depend on it for food. There would be few established household heads, even the most wealthy and the most "urbanised", who do not have a son or relation on their land or on land acquired through their influence. It is the function of a successful household head to find employment for as many of his family as possible. The labour commitment is total and the basic unit of economic organisation is the family, controlled and directed at least to some extent by the household head.[20] A typical family would endeavour to have some member in paid employment, some on the land and some in the "bazaar" sector of the town's economy—a small grocery shop, in the making of handicrafts and other side-line businesses. This diversity in family employment provides material security in an economy which offers insufficient full wage employment; it also indicates the economic obligations borne by the chef d'entreprise towards his kin.

It should be clear that everyone in Tonga is to some extent involved in a money economy, the town dweller somewhat more than the villager but this has not yet led to any noticeable individualisation. There is little evidence of individuals trying to opt out of reciprocal

kin obligations and there is even a reluctance to accept payment for many jobs. Carpenters interviewed indicated that they were often called upon to effect out-of-work repairs and to assist with house construction. None accepted any money payment for their services. Even those Tongans who do accept payment from other Tongans invariably put the onus of ascertaining the price on the receiver of services, thus keeping the relationship within a gift context similar to that enjoyed between kin. This apparent lack of money consciousness, which is not as naive as it sometimes appears, is also seen in the running of kava clubs and kautaha koko'anga, associations of women who make tapa cloth. When these community groups accumulate profits there is little evidence of saving and none of investment motivation. Money is to meet basic and usually immediate needs; it enhances one's respect only when it is used and shared among kin. Accumulation is pointless when one has so many poor relations.

The political organisation of the town is identical to that of the villages except, of course, for the presence of the central government. Ma'ufanga is part of the tofi'a of a noble while Kolomotu'a and Kolofo'ou belong to government. A town officer is responsible to government for each of the town's three villages. At monthly fono these officers inform taxpayers of the government's intentions but there are few laws which apply exclusively to the town. Nuku'alofa is thus perceived and governed as three villages over which the government rules in a manner similar to that of the chiefs of old. Most leadership within the town, whether elected or nominated, is determined along lines of rank and position common to traditional Tonga. While chiefs without government posts have lost some prestige, those with high government posts who do not have chiefly connections are rare indeed.

At the beginning of this discussion it was suggested that the inhabitants of Nuku'alofa meet few challenges peculiar to an urban environment and that most rural and Tongan attitudes are carried over into the town with little or no modification. Its very "ruralness" enables urbanisation to proceed with so few signs of stress. It would, however, be false to assume that the town exerts no new pressures on the rural migrant. Some of these are really rural pressures intensified in an urban setting. It is, for instance, the increased shortage of land and employment, made worse by the rural influx, together with the greater opportunities presented by the town which has been largely responsible for the increase of crime. This is seen in a recent statement by the Director of Education:

> "There is a most dangerous situation developing in the town of Nuku'alofa and within its precincts. Unemployment is rising rapidly. During the next ten years 1,400 employees will retire

369 464 674 and during the same period over 11,000 will join the labour force. Young people at school are already asking for what am I being educated? It is hard to give a truthful answer. Thousands of young people live in and around Nuku'alofa. Many of these young people have left both schools and home. They have exchanged a life of the home and school for a life of the youth group and gang. They live off the land, raiding 'apis, breaking into many homes for food, clothing and money."[21]

369 Other pressures have resulted in diminished respect towards nobles, less formal modes of courtship and changes in dress and diet. But none of these are clear cut urban-rural differences and most of them affect only sections of the population. What is most significant about Nuku'alofa is not that there are differences compared with the countryside, but that these differences are so few. Whether this is because the town is so little urbanised or whether this represents a successful readaption of cherished Tongan values is not yet clear. What is clear is that basic Tongan attitudes and patterns of life remain very little changed in the town context.

the rural migrants

166 No small part of the unlawfulness referred to above can be traced to the large influx of migrants from Tonga's other islands and from the rural villages of Tongatapu (see Fig. 1). This migration is not new but there are very definite signs that, whereas the movement was once primarily towards rural Tongatapu where land was available, movement in the last ten years can more accurately be termed an "urban drift" to Nuku'alofa. The general causes of such movements are well known and need not concern us here. One aspect, however, is of special importance: many of Nuku'alofa's in-migrants are not visiting the town for the first time. Some four-fifths of those interviewed and who were in paid employment in Nuku'alofa had been to secondary schools in Tongatapu. The proportion is not likely to be as high for those not in paid employment but it is certain to remain significant.

591 592 If the migrant is arriving in Nuku'alofa or returning after attending school, he usually gravitates to his relations and frequently he has neither money, land nor employment. He lives with them 591 until he builds a separate home which may well be on their 'api. It 592 is their 'api tukuhau that he uses (see Table III) and it is usually 423 through them that he enquires about the use of another 'api or the registration of one of his own though, if he is single, he may wait 582 until he marries. If he marries into a local family his chances of acquiring an 'api are considerably enhanced. Some two-thirds of those interviewed in Nuku'alofa had married into local families and

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602
166 "I would stay even if I had no job. My sister is here."

464 Although an uneducated migrant probably has more difficulty in obtaining employment, migrants with secondary education have no more difficulty than the locally-born. The migrant's prospects for employment depend, along with all Tongans, on his education and the extent and importance of his kin. Migrants tend to be less involved in agriculture because they have more difficulty in obtaining registered land. They are, therefore, slightly more active in commerce, the produce boards, in certain tertiary areas and in a miscellanea of backyard jobs which are termed part-manufacturing and processing.

156 Most migrants intend to remain in Nuku'alofa and tend to feel
[186] they belong there. The reasons for "belonging" are illuminating and
[171] should further discredit the view that Polynesians have some sort of mystic attachment to their place of birth, an attachment which supposedly outweighs more mundane considerations. "I belong to Nuku'alofa because I can support my children here", was how one informant expressed his feelings, while another in a much more sweeping statement merely said, "Nuku'alofa has everything". Belonging to
602 Nuku'alofa does not, however, mean that the migrant severs his ties with the home island. He belongs more to his family than to a place. It was the institution of the family which supported him on arrival in Nuku'alofa and, once established and part of the family chain, he now
602 assists close relations who remain on the home island. Gifts and
431 visits were exchanged by over three-quarters of those interviewed (see
574 Table IV) and most not participating in such contact either had no close relation remaining in the home island or were young people whose obligations were for the present assumed by older brothers or sisters living in Nuku'alofa. This contact is reciprocal and only stops with the death or migration of the close relations involved.

Table IV

Close Family Gifts and Visits between Islands

	Yes	No	Not Stated
Gifts to Islands	39	18	-
Gifts from Islands	31	24	2
Visits to Islands	41	16	-
Visits from Islands	42	15	-

Number in Sample 57

369 It is the migrant, through his kin, who maintains the closest cultural links between town and country in Tonga. As considerably more than a half of the town's population is so involved, it is not surprising that rural and peasant modes and concepts continue to flow

into the town, ruralising it much more than the town urbanises the migrant.

aspects of urban life

A large number of locally-born men are classified by the census as being involved in agriculture. These men represent nearly one-third of the total male labour force. They are farmers, casual workers and the barely-employed who gain what sustenance they can from the land. They are peasants in the usual sense of the word but they live in a town. The following discussion will therefore deal briefly with certain aspects of their life.

Some twenty-eight per cent of the town's houses are constructed of "composite" materials, that is some part is built of indigenous material such as thatch while other parts are made of exotic material such as corrugated iron. While these houses are found in all parts of the town, there is a marked concentration in the two oldest settled areas, Kolomotu'a and, to a lesser extent, Ma'ufanga (see Table V).

Table V

Housing Materials and Birthplace, Land and Employment of Household Heads

Area	House Type Exotic %	Indigenous %	Composite %	Total
Kolomotu'a	35	33	32	100
Kolofo'ou	52	24	24	100
Ma'ufanga	44	25	31	100
Nuku'alofa	45	27	28	100
Percentage of each House Type with Household Head born outside Tongatapu	33	44	30	
Percentage of each House Type with Household Head with Registered 'Api Tukuhau	53	38	43	
Percentage of each House Type with Household Head employed in "Agriculture"	20	53	43	

Note: sample size 107 households.

Since these are also the best endowed areas for 'api tukuhau, the recent migrant is likely to build in indigenous material while those in paid employment can afford and are likely to build a house entirely of imported materials. Table V demonstrates that 43 per cent of those household heads living in houses constructed of composite materials and 53 per cent of those living in houses constructed of indigenous materials were employed in agriculture. Furthermore, of those living in composite housing only 30 per cent had been born outside Tongatapu.

The overall design, internal and external arrangements of these houses differ little from those of the countryside and this again demonstrates the persistence of traditional modes of life within the town. Many houses adhere to the traditional apsidal or oval floor plan but even those with non-traditional rectangular floor plans are arranged to meet the flexible demands of sleep and entertainment. Adolescent boys have a separate sleeping hut in keeping with the traditional practice of brother-sister avoidance. Living, eating, cooking and washing activities take place in separate buildings in keeping with practices traditional to much of Polynesia.

Tongans living in houses of composite materials have more copra driers on their 'api kolo, clear evidence of their active involvement in agriculture. They own more horses and carts, buy less imported food than those living in large wooden houses. They are more likely to follow the rural practice of eating two and not three meals a day (see Table VI). Their women folk are more involved in the making of tapa in the kautaha koko'anga, in making other Tongan handicrafts, and are active in attendance at the fale hiva or choir house of the local church.

A town's bazaar sector, labour intensive and family directed, is considered by some students of Asian cities to bear at least close resemblance to and have close links with the rural peasantry and therefore deserves some brief mention here. The bazaar sector in Nuku'alofa is not well developed. This is because the Tongan economy itself is underdeveloped, consequently offering fewer opportunities. The main activities in the bazaar sector are small-scale trading from single room shops which sell at prices slightly in excess of the European firms from where they have purchased their goods; the hawking of handicraft goods mainly to tourists; and the sale of primary produce such as ground foods, kava, Tongan oil and shellfish. In some cases the people involved are middlemen acting for villagers, and one group, the fakafefine, have some form of loose cooperation which cuts across kin affiliations. The fakafefine (the word means "like a woman") work in teams, each team jealously guarding its round of customers. Some have groups of women manufacturing the articles they sell and most have trading arrangements beyond Nuku'alofa and

121 readapted rather than transformed."[25] The point is re-emphasised by Franklin who views peasant society as a "residual system" within a larger capitalist economy and points to the resilience of the peasantry.[26] Gundar Frank introduces a new dimension which, if accepted, points to a prolonged existence for peasant societies and systems. He suggests that underdevelopment in some countries is the obverse of development in others, both being part of a "single process of capitalist development".[27] The modern commentator often finds difficulty in accepting that non-western societies may not choose western forms in the final working out of their urban and rural futures but, if we accept Frank's views, the peasantry appear to have an assured future in underdeveloped countries. Franklin's observation that the peasantry shows remarkable resilience in adverse conditions typical of underdeveloped countries seems to support this. Both writers would appear to agree that the increased penetration of capitalism does not necessarily eliminate peasant systems of production—or, presumably, peasant-like attitudes within the broader
128 society. At this point it would therefore seem appropriate to
511 consider those reasonably well-off families living in Nuku'alofa
184 (those living in "large wooden" houses (see Table VI)) whose paid employment makes them independent of a supplementary income from agriculture and who, for purely economic reasons, would do better by opting out of kin obligations.

369 How far have these urbanised and often superficially
184 westernised families rejected activities common to others in the town? They are by definition less involved in the peasant economic system but they remain very much a part of the traditional society. All attitudes to important events in the life cycle, such as birth, the celebration of the first birthday, circumcision, courtship, marriage and death, are retained. Their attitudes towards the organisation of society, the hierarchy of king, nobles, church, family and authority
[353] generally, are also retained. The physical organisation of their houses is the same in spite of a greater abundance of western articles
[352] and furniture. It is not uncommon, for example, for beds to be used for the storage of special mats while the people sleep on the floor. In one case the adults slept on mats in a traditional fale leaving the comforts of their modern house for the convenience of others.
[358] Sleeping, eating, cooking and washing units are kept apart, kava remains an important ceremonial and social drink, the stone umu is still used, tapa and mats remain symbols of wealth and prestige and the wearing of the ta'ovala and kiekie remain as signs of the well dressed. Participation in the kautaha koko'anga is less evident but these families are keen recipients of "gifts" made by such activities. They are actively involved in the fale hiva which, in this respect, is a rallying point for established and status conscious families. The closer these people become to the apex of society, the more committed

they are to its retention. The less well-off may retain traditional values and activities because they act as socio-economic securities; the better-off because they enhance their socio-political status (see Table VI).

Attitudes to misdemeanours and crimes such as illegitimacy, prostitution, the fakafefine and prisoners are much the same among the upper levels of urban society as they are among the rural peasants. Crimes are often considered irritating or amusing. A thief who avoids detection is "cunning", one who is caught is "stupid"; an unmarried mother is "silly"; working groups of prisoners stop to talk to friends in the street and are readily accepted back into the community upon their release. A different view, however, is taken when one breaks social tapu concerning kin and rank. Any lapse in the social graces is viewed most seriously. The people of Nuku'alofa, to adapt Frank's analogy, operate within a chain of constellations and satellites based on kin and rank and within this chain social and economic functions are barely separable. The people are more money conscious than they were, they are subjected to the influences of tourism and the pressures of population growth, but to date there are few signs that these changes have caused a corresponding change in attitudes towards kin, an essential concept of peasant and traditional societies.

With empirical studies of Pacific towns still in their infancy, there seems little point in fixing a label to the features we have described in Nuku'alofa. A too ready use of such terms as "agro town", "pseudo-urbanisation" or "subsistence urbanisation" will not help to untangle the webs of society. Certain sectors of the town are predominantly peasant; others are at least partly proletarian or bourgeois, and the two sectors are inextricably interwoven. Clearly peasant systems and peasant attitudes are not purely a rural phenomenon. They can exist among migrants to towns, in the bazaar and tertiary sectors and the traditional attitudes which stem from rural socio-economic roots can be found at all levels of town society. In the long run the social and cultural attitudes of classes within a society usually reflect their economic interests. What is not clear in Nuku'alofa is whether classes, in the usual sense of the word, yet exist. In the short run Tonga and other underdeveloped countries are "all at different stages of development, or underdevelopment, as a result of their varying historical experiences of capitalism, their indigenous socio-economic structures, and the interaction of the one on the other."[28] There is nothing inevitable about the end result. The theoretical model of transition from peasant to proletariat is not predictive and for Nuku'alofa radical changes seem a long way off. At present there is considerable evidence that the so-called rural element is increasing. Labour is not becoming more specialised, the

121 economy remains labour intensive, the imbalance of the economy ensures
369 a continued flow of peasant immigrants and kinship ties continue to provide security for the poor and status for the well-off. The "ruralisation" of Nuku'alofa is likely to continue because rural and traditional attitudes and forms of activity are a real and very necessary means of tackling urban problems.

000 It seems likely that only drastic internal changes can lead to a breakdown of the existing socio-economic relations based on kin. Peasant societies generally have shown a tremendous resilience and capacity for survival and there is no reason to suppose that urban peasant societies are more brittle. It is as well to recall, also, that Tongans long ago demonstrated their capacity to change forms without undermining substances.

369 Nuku'alofa in these respects is neither totally unique nor
[177] solely transitional; it is a variant resulting from its own histori-
[178] cal experience of the impact of western technology and economic
[171] organisation upon a traditional socio-economic system. It represents but one shade within the vast spectrum of urbanism in underdeveloped countries.

66: Walsh K-5 (1963-1964) 1969 0U9 Tonga 0U9
Nuku'alofa

13. Employment figures alone are an insufficient criterion for determining "urban" and "rural" in the Pacific. This is demonstrated by comparing selected employments from "urban" Nuku'alofa with similar employments from "rural" Arorangi described by Bassett in the present volume. 464 369 171

	Nuku'alofa 1956 (males 20-59)	Arorangi 1961 (males over 15 years)
Agriculture, Planting and Fishing	46.3	52
Industrial	6.3	6
Trade & Communications	5.2	5
Commerce & Finance	5.6	6
Public Administration & Professions	9.7	8

14. Spillius, 1959(B).

15. Gifford, E.W., 1929, "Tongan Society", Bernice P. Bishop Mus. Bulletin, 61: 171, refers to a description of Tonga as "a fully feudal society (in which the) head of the clan has become a landlord". 113

16. For an historical account see Rutherford, N., 1966, Shirley Baker and the Kingdom of Tonga, Unpublished Ph.D. Thesis, A.N.U., Canberra.

17. For an elaboration of the effects of this parallelism or "dual framework of society", see Walsh, A.C., 1968, "Politics, Culture and Resource Utilisation in Tonga", Proc. 5th N.Z. Geog. Conference, 119-124. Note, however, that this paper uses the term "peasant" more loosely than the present paper.

18. Franklin, S.H., 1965, "Systems of Production: Systems of Appropriation", Pac. View., 6: 145-166.

19. Maude, 1965, p.50, writes "the traditional groupings or extended family in which married sons stayed in the households of their fathers is no longer the usual form". The modern nuclear family, however, still retains intimate contact with at least 50 relations according to Spillius, 1959(B), and urban families probably have more contacts than those in the villages. Nayacakalau, R.R., 1963, "The Urban Fijian in Suva". In A. Spoehr (ed.), Pacific Port Towns and Cities, 135, and Bellam, 1964, 142, noted similar findings in urban Suva and Honiara. 592 593 595 [369] [113] [171]

20. Franklin, 1965, 157, in defining the peasantry asks "What is their labour commitment, their institutional basis, their control and direction and their form of ownership...?" 000

368 Besides dwellings and the attendant secondary buildings, Puke has
366 a church, a town building, a kindergarten, a clinic and a store. All except the last are grouped on a small piece of land donated by the noble for community purposes. The store is located next to the house of the store owner.

491 An unsurfaced road connects the village with the main road and
494 buses traveling the main road are usually the only form of motor trans-
365 port used by the villagers. A power line runs beside the main road but no feeder line has been extended to Puke and there is no other source
312 of electrical power. The major sources of water are rain catchment and storage in brick and cement cisterns. There are also a few hand-dug wells from which water is obtained by rope and bucket.

Village Demography

162 Village population in 1971 was 261 persons living in 42 households.
[592] Table 5_A^A describes the population by age and sex. The population has
(166) grown considerably since 1955 due largely to migration from more remote
(161) islands of Tonga (See Table 6_A^B for origin of household heads and Table 7_A^C
369 for crude growth rates). Puke, being close to Nuku'alofa, has experi-
166 enced the effects of rural-to-urban migration in the archipelago (See Walsh 1969: 95-98). Recent immigrants have come to Puke because it provides easy access to services centered in Nuku'alofa not available in most of the more rural locales. Opportunity for education and better health care are frequently given as reasons for wishing to live close
166 to Nuku'alofa. Informants also mention the greater availability of

A_A^A, B_A^A, C_A^A [See pp. 27-29 respectively--Analyst]

[TEXT CONTINUED ON PAGE 30]

794 at least three hours per week for choir practice:

Monday	5:00 - 6:00 p.m.	Prayer Meeting
Tuesday	6:00 - 7:00 a.m.	Sermon
Wednesday	--------	
Thursday	--------	
Friday	6:00 - 7:00 a.m.	Prayer Meeting
Saturday	--------	
Sunday	6:00 - 7:00 a.m.	Prayer Meeting
	10:00 -11:00 a.m.	Sermon
	1:00 - 2:00	Sunday School
	3:00 - 4:00 p.m.	Sermon

Summary

121 In this chapter I have provided a general introduction to Tonga
128 and outlined what I consider to be important aspects of Tongan village life. This information is important in understanding the context within which exchange and reciprocity occur. Through the data presented here I tried to demonstrate that Puke can be considered typical of Tongan villages in some ways and atypical in others. If I were to limit myself [369] to a few key phrases in describing Puke relative to other villages, I would say it is a small, well-integrated village, relatively backward in terms of its technology, and isolated not by geography, but by the traditional and rural life style of its inhabitants.

80: Maude K-5 (1961) 1971 OU9 Tonga OU9

land is much higher among in-migrants than among those who belong there by birth (Maude 1965:118-19, Nayacakalou 1959:111), and the difficulty and uncertainty of obtaining an allotment has probably deterred migration from the densely settled areas. At the same time there has not been much opportunity for those who have allotments in these areas, but who have moved elsewhere, to exchange their old holdings for new ones (an exchange which is provided for in the Land Act) and so make land available for others, as should have happened in the case of Ha'afeva discussed earlier.

The main direction of migration within Tonga in recent years, moreover, has been towards Nuku'alofa and other parts of Tongatapu where the opportunities for earning money and the better educational facilities have been more important attractions than the possibility of obtaining land. People have been much less interested in moving to 'Eua and to western Vava'u, where land has been the only attraction (Maude 1965:81-6, Walsh 1964b: 188). Thus internal migration has only partly led to a better distribution of land; it has had only a small effect on the tenure problems of the densely settled areas, and among the rapidly-growing population of Nuku'alofa a large proportion of households are landless. In a sample survey of households in the town Walsh (1964b:63) found that only forty-nine per cent had a tax allotment on Tongatapu, sometimes miles from the town, while another six per cent had land elsewhere in Tonga. In the 1966 census only thirty-three per cent of taxpayers in Nuku'alofa stated that they had a tax allotment.

LAND TENURE AND AGRICULTURAL PRODUCTION

The Tongan land tenure system also needs to be assessed in terms of the way in which land is used. Has this system, with its individual title to land and security of tenure, proved a satisfactory basis for cash cropping, and has it fostered the development of independent small holders free of some of the problems found with more traditional systems of land tenure in other parts of the South Pacific?

Cash cropping in Tonga has been largely confined to coconuts and bananas, but there is no indication that land tenure has been a factor in the non-acceptance of other crops. The early stages in the development of the present tenure system were apparently marked by an increase in cash cropping, for Rutherford (1966:58-9) quotes the opinion of Maudslay that the 1862

Population Distribution

161 The distribution of population also has an effect
162 on the nature of the agricultural system. Since European contact, there have been major Kingdom-wide changes in the distribution of the population, as well as changes within each island group.

161 Immigration from the outer islands has resulted in
162 a disproportionate growth of Tongatapu's population. Popu-
[166] lation figures from four censuses (Table 7) show that whereas Tongatapu had just over 40 percent of the Kingdom's population in 1921, it now has over 60 percent. From 1956 to 1966 population growth in the outer islands was less than one-third that of Tongatapu. During these ten years, population growth has been 76 percent in the capital city of Nuku'alofa and environs; even in rural Tongatapu, the growth rate of 43 percent is greater than that of the Kingdom as a whole (Tupouniua, 1958:42-45; Fiefia, 1968:38-42).

166 Incentives for migration to Tongatapu and especially
369 to Nuku'alofa include: better educational and recreational facilities; opportunities for wage labor; better transportation and chances to go overseas; more developed network for marketing agricultural products locally and overseas;
161 and the general aura and excitement of urban life. Regard-
162 less of the motives for population redistribution, the
182 effect on Tongatapu's agriculture is considerable, and there
311 is an increased demand for land and a burgeoning landless class on Tongatapu.

361 178 423

the bush) was also sharpened by legal definition in the "Constitution of 1875" (Walsh, 1970:29-30).

361 369

Nuku'alofa became the center of Wesleyan missionary work in 1828; in 1845, King George Tupou I selected it as the site for his capital (Maude, 1965:63). Since that time Nuku'alofa, which is composed of three coalescent villages, Kolomotu'a (Old Town), Kolofo'ou (New Town), and Ma'ufanga, has been the religious, governmental, educational, commercial, economic, and cultural center of Tonga.

361 491 162

Including the three villages of Nuku'alofa, there are 59 villages on Tongatapu, almost all situated on the road which encircles the island. In 1966 the "urbanized" area of Nuku'alofa with the satellite town of Haveluloto had a population of 17,241; the next largest village is Mu'a (which includes Tatakamotonga and Lapaha), the ancient capital located in the Eastern District, with a population of 3,502. The smallest village is Kala'au in the Southwest with a population of 89; the median population of all

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villages is 412.5 (based on 1966 census figures). Surrounding each town is an area of bush allotments to which the Tongan farmers commute. In some cases, however, especially in the Fua'amotu-Pelehake area in East-Central Tongatapu, individuals farmers do have permanent residences on the bush

361 659 423

allotments. In this particular area, the government has attempted to re-eastablish a dispersed settlement pattern by offering them single, larger allotments ranging from 12 and

423 might be better tabulated on the basis of the household,
592 the major economic and social unit. In the survey of 150 households throughout Tongatapu, it was found that 89 percent had some access to bush allotments (Table 12).
423 Because the survey was administered to households that were
592 located on town allotments, all sample households had
128 either permanent or temporary access to a town allotment
[125] (Table 13). If the survey had been administered on a family or individual basis there would undoubtedly have been a number of people without rights to town allotments.

162
423 Table 11. Number of eligible males with and without bush allotments (Nuku'alofa figures include Haveluloto;
[128] Tongatapu figures do not include 'Atata and 'Euaiki).

	With	%	Without	%	Not Stated	%	Total
Nuku'alofa	1328	32	2757	67	23	1	4108
Tongatapu	4774	39	7479	61	69	1	12322
Other Islands	3531	46	4074	53	47	1	7652
Tonga	8305	42	11553	58	116	1	19974

Source: 1966 Census:89-96.

423 In those villages outside of Nuku'alofa, only four out
592 of 105 households had no access to tax allotments. In
369 Nuku'lofa (Kolomotu'a, Kolofo'ou and Ma'ufanga), however, 12 our of 45 had no access to bush allotments (Table 12).

423 allotments, some households and many individuals have only
425 temporary tenure. They are generally younger brothers who were not legal heirs or are immigrants from other islands or districts. The ability of an individual or household to obtain temporary occupancy seems to be, to a great extent, contingent on fulfillment of social obligations.

423 Finally, it is not uncommon to find landholders rent-
425 ing their land to others, although strictly forbidden under
427 law. An increasingly common practice seems to be rental to
[241] farmers who want additional acreage for commercial crops, such as bananas, watermelons, and garden vegetables, or for
[435] yams to be sold locally. The rental fee for an eight and a quarter allotment ranges from as low as five to over a hundred dollars per year or a percentage of the profits. The period of rental usually runs from one to five years. It depends on the individual agreement whether the tenant has usufruct rights to coconuts planted on the allotment. Many Tongans who are willing to rent all or part of their allotments are wage earners rather than full-time farmers.

423 Tables 14 and 15 show the nature of tenure to bush and town allotments for the sample households on Tongatapu.
[369] The highest percentage of registered allotments are in the
[161] urban area of Nuku'alofa (Kolomotu'a, Kolofo'ou and Ma'ufanga) and Kolovai, both areas with high population densities and smaller parcels of land. Similarly, in Kolonga, one of the first areas to be resurveyed according to the Cadastral

434 copra for cash(Table 20), and many other sources of income
434 were also related to the agricultural system. Of 141
households, there are fifteen that have at least one female
462 wage earner, four with women shopkeepers, three with women
463 who sold products at the market, and 53 with women who made
and sold handicrafts.

434 Table 20. Percent of households having at least one member
463 receiving income from specified sources (Based on 141
households on Tongatapu).

369

Source	Non-Urban	Urban	Total
Full-time wage earners	21%	82%	40%
Part-time Wage earners	14%	27%	18%
Makes copra	45%	7%	33%
Sells coconuts	66%	32%	55%
Ships bananas	33%	2%	23%
Ships melons	13%	2%	10%
Ships other produce	9%	5%	8%
Sells at market	44%	2%	31%
Sells handicrafts	48%	23%	40%
Sells meat(beef,pork,etc.)	31%	7%	23%
Sells fish	14%	5%	11%
Sells in village	11%	0%	8%
Shopkeeper	3%	2%	3%
Remittances	30%	32%	50%

434 Table 20. Continued.
463
369

Other sources	5%	16%	9%
Total sample size	97	44	141

434

The great diversity of store goods which are now desired by the average Tongan family (Tables 21 and 22) emphasizes the growing need for cash. In addition, cash is needed for church, school fees, taxes, and to fulfill social obligations within the family, the village, and to nobles or even to the town officer in some cases.

439 Overseas Income
[241]

The primary source of Tongan overseas income is the agricultural system. During the period from 1967 to 1971, products of agricultural origin constituted 97 percent by value of all exports (Table 23). The remaining 3 percent included re-exported motor vehicles, empty containers such as oil drums and gas cylinders, goods under bond, and personal effects. A small proportion of the total value of exports is made up of agricultural products sent by Tongans as gifts to relatives overseas, including yams, taro, bananas, watermelons, sugar cane, mangoes, kava, pineapples, and handicrafts. Such items fulfill social obligations and indirectly account for considerable income in the form of remittances from the (grateful) recipients of the goods.

[431]
[602]

241 476 [621] or kautaha toungaue, generally based on village residence or in some cases on church or family ties. Of 126 households sampled on Tongatapu, 33 heads of household belonged to

241 476 kautaha toungaue. All of these 33 households were in villages outside Nuku'alofa. Of 31 households in Nuku'alofa

369 [621] no head of household belonged to a kautaha. This probably reflects urban breakdown of "village solidarity" which

241 476 provides the main basis for membership in these groups. The number of members ranged from 2 to 15 with the median being

241 476 7 members. The average number of days worked per week was 4.9. Some kautaha's work only during the yam harvesting

461 planting and cultivating seasons from January to September, but most work throughout the year.

241 476 [686] The kautaha works on the allotments of its members in rotation. If a member misses a working day, the kautaha either charges him the going rate of 20 cents per hour for the time he has missed, skips his allotment during that

241 476 461 rotation cycle, or in some cases does not penalize him. The number of allotments worked on per day ranges from one to four with a median of two. The number of hours worked on each allotment ranges from one to eight with an average of 3.6. The total hours per day worked by a kautaha averages

241 476 8.1 with a median of 6. The major tasks performed by the kautaha toungaue include clearing bush, burning, planting, weeding, and harvesting.

[425] Another temporary communal work group is the toutu'u

241 476 [425] [621] [794] 'ufi, which is generally formed for the purposes of planting yams and other staple root crops on a plot of land donated by or rented from the holder. Whereas the village tends to be the primary basis for membership to the kautaha toungaue, the church is of almost equal importance in the case of the toutu'u 'ufi. Certain procedures are generally followed by the toutu'u 'ufi. Each member is allotted a predetermined number of rows of yams, using planting material that he supplies individually. The work, which includes tasks such as clearing the land, planting, weeding, and harvesting, is all done as a group. After the yams are harvested, taro and paper mulberry are commonly planted, with manioc, bananas, or giant taro being planted occasionally. In only two cases out of 48 sample toutu'u 'ufi was the land fallowed after the yam harvest. A common occurence after the yam harvest is the cultivation of paper mulberry by communal women's groups (toutu'u hiapo) for use in making tapa cloth. Out of 142 households, 34 percent participated in toutu'u 'ufi in 1970-71, whereas 51 percent had participated in toutu'u 'ufi in the past five years. [369] There was little difference between town and bush areas, with 29 percent and 36 percent of the heads of households, respectively, having participated in toutu'u 'ufi. Membership in a given toutu'u 'ufi ranged from 2 to 40 with a median of 7 members.

A limited number of households, 13 out of 138, also

241 metal adzes (toki Tonga), owned by only 2 percent of the
412 sample households. In the cases of machetes, hele pelu, and the two most important spades, the huo keli and the huo lafalafa, many households owned more than one of each. Rakes
[369] and shovels are commonest in the urban area of Nuku'alofa
[247] where ornamental gardens are more prevalent.

241 Using only these implements, most Tongan farmers cut down the bush or forest vegetation and after burning the accumulated plant material after drying, prepare the land for planting, plant, weed, and harvest the different crops.
241 An increasing number of farmers, however, are beginning to
407 use the tractor-pulled plow and disc-harrow and, although
654 only one out of 141 households owned a tractor, 53 percent have had their allotments plowed at one time or another, mostly by the Coconut Replanting Scheme or the Agriculture Department for planting new coconuts or other export crops.
241 of the 140 households interviewed, 43 percent felt that plowing was good for the soil, 44 percent felt that it was bad and caused the soil to become infertile, 13 percent had
241 no opinion. Regardless of the feeling of the average Tongan
654 the Agriculture Department, the Coconut Replanting Scheme, and the Produce Board have been advocating the use of the plow rather than burning the dried vegetable matter.
[492] Although the Agriculture Department has experimented with draught animals for plowing, Tongans have never adopted this practice (Government of Tonga, 1952:3).

241 For commuting between the bush and town allotments and
481 transporting agricultural produce, the commonest modes of
494 transportation are walking, riding horses, horsecarts
493 (saliote), bicycles, and buses. Of a sample of 140 house-
492 holds, only 9 percent owned a motor vehicle whereas 26
percent owned bicycles; 28 percent owned horsecarts (saliote)
494 and 48 percent owned horses. The percentage of households
369 owning bicycles and motor vehicles and those riding buses
to their bush allotments was higher for Nuku'alofa than the
rural areas, whereas understandably the reverse was true of
241 those owning horses and horsecarts. Farmers desiring to
494 transport considerable volumes of crops, firewood, or other
427 material often rent trucks or horsecarts. In maintaining
241 the fertility of the soil, Tongan farmers have considerable
242 empirical knowledge and understand the necessity of crop
rotation and a sufficient fallow period. They realize that
stands of large trees or certain shrubs and herbs, such as
Lantana camara, Leucaena leucocephala, Paspalum conjugatum,
and Phaseolus semierectus, indicate better soil than species
like Panicum maximum, Cyperus rotundus, or Sida rhombifolia.
They also realize that the length of the fallow period has
been declining and that the soils are presently more
impoverished than in the past. The primary means that most
Tongans use to improve soil fertility are fallowing and
[654] burning dead plant material. The government encourages the
use of commercial fertilizers, and out of 137 sample house-

351 342 **Selected Agricultural Practices and Conditions**

All allotments had at least one main sleeping house or fale mohe (Table 43).

351 342 369 Table 43. Frequency occurrence of specified housetypes on 192 town allotments (113 in Nuku'alofa and 79 in rural villages) (The numbers in parentheses indicate the number of allotments with more than one of a given housetype).

Housetype	Nuku'alofa Number of Occurrences	Rural Number of Occurrences
Large Wooden	64 (3)	27
Large Brick	11	8
Small Wooden	19 (1)	5
Thatch	56 (3)	42
TOTAL	150 (7)	82

[343] The rural areas have a lower percentage of large wooden houses than the Nuku'alofa area. The frequency of occurrence of other structures such as separate kitchens (peito), outhouses (fale vao) and wash houses (fale kaukau) reflected no significant differences between the rural and urban areas.

351 245 [417] A large number of allotments, particularly in Nuku'alofa, were fenced with either barbed wire or living fences (Table 44). Cordyline terminalis (si) generally

351
245 serves as a border rather than a true hedge or fence. The hedges and fences are useful for ornamental purposes, to delineate property lines, and to protect gardens from livestock damage.

351 Table 44. Frequency occurrence of specific fence types on
245 192 town allotments (113 in Nuku'alofa and 79 in rural
417 villages).
369

Fencetype	Nuku'alofa Occurrences	Rural Occurrences
Hibiscus spp.	45	18
Nothopanax spp.	45	11
Barbed Wire	34	19
Cordyline terminalis	26	4
Acalypha spp.	14	1
Erythrina variegata	9	0
Thunbergia erecta	8	4
Jatropha curcas	7	0
Wood	0	1

312 One major difference between the Nuku'alofa and
369 rural town allotments is the greater availability of water in Nuku'alofa (Table 45). In the rural villages, although some wells and rainfall catchment systems exist, there were no private water systems and most people depended

upon a common public water tap.

Table 45. Frequency occurrence of specified water systems on 192 town allotments (113 in Nuku'alofa and 79 in rural villages).

Water System	Nuku'alofa Occurrences	Rural Occurrences
Private tap	41	-
Well	48	2
Rainfall catchment	41	13

There was also considerable livestock keeping on town allotments which, in many cases, tends to affect the types of plants that can be grown there (Table 46). Chickens, goats, cattle, dogs, and cats were found with similar frequencies on town allotments in both Nuku'alofa and the rural villages. Of the 141 allotments with chickens, 19 allotments had improved chicken breeds for egg production, 13 of these in Nuku'alofa. Pigs and horses, however, which cause the most widespread damage to crops, were much more abundant on rural town allotments. Furthermore, in Nuku'alofa, on only 7 percent of the allotments were pigs allowed to roam free, whereas in the rural villages, pigs were allowed to roam free on 67 percent of the allotments. Even in Nuku'alofa, where it is illegal for pigs and horses

Table 46. Frequency occurrence of specified animals on 192 town allotments (113 Nuku'alofa and 79 in rural villages).

Type	Nuku'alofa Occurrences	Rural Villages Occurrences
Chickens	80	61
Dogs	69	53
Pigs	51	67
Horses	31	47
Cats	33	24
Ducks	18	2
Goats	10	10
Cattle	9	4

to roam free, considerable crop damage is caused by escaped animals. Ducks were more commonly found in the more low-lying and swampy areas of Nuku'alofa.

Staple Crops

The same range of staple crops was found on town allotments as on bush allotments (Table 47). However, crops such as manioc (Manihot esculenta), yams (Dioscorea alata), and sweet potatoes (Ipomoea batatas), which were common in large acreages on bush allotment, were present

241 on 10 percent or less of all the sample town allotments.
244 On the other hand, staple crops such a swamp taro
241 (Colocasia esculenta), American taro (Xanthosoma spp.),
244 giant taro (Alocasia macrorrhiza), plantains (Musa paradi-
245 siaca), pata bananas (Musa sp.), and bananas (Musa sapientum),
which require more care and are often planted individually,

241 Table 47. Frequency and percent occurrence of specified
244 staple crops on 192 town allotments (113 in Nuku'alofa and
245 79 in the rural villages).
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Crop	Nuku'alofa Number of Occurrences	%	Rural Allotments Number of Occurrences	%	Total Number of Occurrences	%
Swamp taro	62	55%	4	5%	66	34%
Plantains	43	38%	6	8%	49	26%
American taro	44	39%	2	3%	46	24%
Pata bananas	44	39%	2	3%	46	24%
Bananas	43	38%	2	3%	45	23%
Giant taro	35	31%	7	9%	42	22%
Manioc	18	16%	1	1%	19	10%
Yams	16	14%	3	4%	19	10%
Sweet potato	7	6%	0	0%	7	4%
Goa yam	6	5%	0	0%	6	3%

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Table 48. Nature of tenure and access to bush allotments on Tongatapu of households on 192 town allotments (113 in Nuku'alofa and 79 in rural villages).

Nature of Tenure	Nuku'alofa		Rural	
	No	%	No	%
Households with Bush Allotments	66	58	61	77
Households with Temporary Access to Bush Allotments	7	6	13	16
Households with No Access to Allotments	40	35	5	6
Total Town Allotments	113	100	79	100

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Supplementary Food Crops

The range of supplementary food and beverage crops grown on town allotments included 25 different species (Table 49). Except for chile pepper and pineapple, the most important of these are anciently established plants such as edible hibiscus (Hibiscus manihot), sugar cane (Saccharum officinarum), the edible type of si (Cordyline terminalis), kava (Piper methysticum), lemon grass (Cymbopogon citratus), and species of the genus Passiflora. Other more recent introductions such as green beans (Phaseolus vulgaris), tomatoes (Lycopersicon esculentum), pumpkins (Cucurbita pepo), eggplant (Solanum melongena), and

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Table 49. Frequency occurrence of specified supplementary food crops on 192 town allotments (113 in Nuku'alofa and 79 in the rural villages).

Plant	Nuku'alofa	Rural	Total
Chile pepper	69	28	97
Edible hibiscus	64	15	79
Sugar cane	50	11	61
Si	52	7	59
Kava	43	6	49
Pineapple	22	6	28
Passionfruit(hard)	17	11	28
Passionfruit	19	3	22
Lemon grass	16	4	20
Grenadilla	10	5	15
Green beans	12	1	13
Cherry tomato	10	1	11
Tomato	9	0	9
Pumpkin	9	0	9
Egg plant	2	4	6
Corn	3	1	4
Peas	3	1	4
Ginger	2	0	2
Green onion	1	0	1
Bulb onion	1	0	1
Watermelon	1	0	1

241 369 Table 49. Continued.

Plant	Nuku'alofa	Rural	Total
Peanuts	1	0	1
Cabbage	1	0	1
Carrots	1	0	1
Cucumber	1	0	1

241 [369] corn (Zea mays) are cultivated to a lesser extent. Again, cultivation of these plants is much more frequent on town allotments in Nuku'alofa than in the rural areas.

Important Non-Food Crops

There was an even greater range of important non-food plants which were either cultivated or protected on the 241 824 sample town allotments (Table 50). The most widespread plants were those useful for handicrafts and the preparation of other material objects (Appendix E), A and included

[TEXT CONTINUED ON PAGE 301]

241 369 Table 50. Frequency occurrence of specified non-food plants on 192 town allotments (113 in Nuku'alofa and 79 in rural villages).

Scientific Name	Nuku'alofa	Rural	Total
Pandanus sp.	51	12	63
Gardenia jasminoides	34	24	58
Pandanus sp.	47	4	51

A [See Category 116, pp. 377-431--Analyst.]

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Table 50. Continued.

Scientific Name	Nuku'alofa	Rural	Total
Gossypium brasiliense	21	8	29
Pandanus sp.	22	2	24
Coix lachryma-jobi	21	2	23
Achyranthes aspera	18	3	21
Gardenia taitensis	15	5	20
Duranta repens	12	3	15
Pandanus sp.	14	0	14
Zingiber zerumbet	13	1	14
Broussonetia papyrifera	13	0	13
Coleus amboinicus	11	2	13
Vigna marina	9	2	11
Cycas circinalis	8	0	8
Curcuma longa	6	0	6
Hedychium coronarium	5	1	6
Jasminum sp.	5	1	6
Wedelia biflora	5	0	5
Piper puberulum	5	0	5
Hedychium sp.	3	1	4
Maranta arundinacea	1	3	4
Artabotrys uncinatus	1	1	2
Derris elliptica	1	1	2
Evodia hortensis	1	0	1
Colubrina asiatica	1	0	1

241 Table 50. Continued.
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Scientific Name	Nuku'alofa	Rural	Total
Nicotiana fragrans	1	0	1

241 a number of varieties of Pandanus (tofua, tapahina, paongo
824 and kie), as well as Gossypium brasiliense, Coix lachryma-jobi, Broussontia papyrifera, and Maranta arundinacea.
241 Also of considerable importance were plants used for tradi-
824 tional house and body ornamentation: Gardenia spp.,
278 Coleus amboinicus, Hedychium spp. (tevunga and teuila), and Artabotrys uncinatus; and for medicinal purposes: Achyranthes aspera, Zingiber zerumbet, Vigna marina, Curcuma longa, Jasminum spp., Piper puberulum, and Wedelia
[226] biflora. The others are all used in some way (Appendix E), such as Derris elliptica, which is used for stupefying
241 fish. Although there is a considerably higher frequency
369 of non-food plants than food plants on rural town allotments, there is still a higher frequency of these plants on Nuku'alofa town allotments.

Important Tree Species

241 **Fruit Trees**

245 Fruit trees were the dominant vegetation type on most
369 town allotments, both in Nuku'alofa and in the rural

A [See Category 116, pp. 377-431--Analyst.]

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369 villages(Table 51). The similarity in frequencies of fruit trees on the Nuku'alofa and rural allotment may be partly explained by the resistance of trees to livestock damage and the need to safeguard the fruit from occasional theft.

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245 The most widespread species are primarily native species or pre-European introductions: the breadfruit (Artocarpus altilis), which was present on over three-quarters of all sample allotments, mango (Mangifera indica), the coconut (Cocos nucifera), tava (Pometia pinnata), citrus trees (Citrus spp.), Tahitian chestnut (Inocarpus edulis), Indian almond (Terminalia catappa), and Polynesian vi- apple (Spondias dulcis). Other post - European introductions from America included soursop (Annona muricata), avocado (Persea americana), papaya (Carica papaya), sweetsop (Annona squamosa), and guava (Psidium guajava) (On town allotments the guava generally is found as a cultivated tree rather than a secondary vegetation species.) The remainder of the fruit trees are mostly of more recent introduction, such as the tamarind (Tamarindus indica) and members of the genus Musa which where not considered under staple food crops.

Other Useful Trees.

[369] There is an even greater range of other useful native and introduced tree species (Table 52). As in the case of fruit trees, there was no significant difference in the frequency of occurrence between Nuku'alofa and rural sample

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Table 51. Frequency occurrence of specified fruit trees on 192 town allotments (113 in Nuku'alofa and 79 in rural villages).

Scientific Name	Nuku'alofa	Rural	Total
Artocarpus altilis	91	57	148
Mangifera indica	76	39	115
Cocos nucifera	66	47	113
Pometia pinnata	61	17	78
Citrus limon	46	29	75
Annona muricata	50	21	71
Citrus reticulata	44	22	66
Persea americana	48	16	64
Carica papaya	58	8	66
Psidium guajava	42	14	56
Citrus sinensis	17	22	39
Citrus medica	23	4	27
Annona squamosa	13	8	21
Inocarpus edulis	14	4	18
Musa sp.	9	6	15
Spondias dulcis	7	4	11
Terminalia catappa	7	2	9
Citrus aurantifolia	7	1	8
Tamarindus indica	4	2	6
Syzygium malaccense	2	3	5

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Table 51. Continued.

Scientific Name	Nuku'alofa	Rural	Total
Citrus sp.	3	1	4
Musa lady-finger clone	3	0	3
Syzygium jambos	2	0	2
Annona reticulata	2	0	2
Ficus carica	2	0	2
Morus alba	1	0	1
Malus pumila	1	0	1

town allotments. Most of these trees seem to have been purposefully planted, although some species such as Hibiscus tiliaceus, Aleurites moluccana, Pandanus tectorius, Casuarina equisetifolia, and Bischofia javanica might have been protected relicts of former natural vegetation. There were many instances of deliberate planting of useful native trees which are becoming increasingly difficult to find growing wild, such as Decaspermum fruticosum, Santalum yasi, and Syzygium neurocalyx. (The major uses of these trees are listed in Appendix E.)

241 In summary, the survey of the Nuku'alofa and rural village town allotments indicates that the town allotments

[See Category 116, pp. 377-431--Analyst.]

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Table 52. Frequency occurrence of specified useful trees in 192 town allotments (113 in Nuku'alofa and 79 in rural villages).

Scientific Name	Nuku'alofa	Rural	Total
Plumeria spp.	70	44	114
Hibiscus tiliaceus	39	29	68
Aleurites moluccana	34	9	43
Ceiba pentandra	11	29	40
Pandanus tectorius	13	13	26
Glochidion spp.	25	1	26
Casuarina equisetifolia	18	6	24
Bischofia javanica	9	14	23
Cananga odorata	15	7	22
Erythrina variegata	11	11	22
Syzygium aromaticum	17	5	22
Cinnomonum zeylanicum	16	5	21
Thaleria disperma	13	7	20
Aglaia saltatorum	12	5	17
Syzygium corynocarpium	15	1	16
Morinda citrifolia	7	9	16
Alyxia stellata	13	2	15
Fagraea berteriana	12	3	15
Macaranga harveyana	12	1	13
Ficus obliqua	11	1	12

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Table 52. Continued.

Scientific Name	Nuku'alofa	Rural	Total
Jatropha curcas	6	5	11
Tournefortia argentea	4	4	8
Garcinia sessilis	4	3	7
Premna taitensis	4	3	7
Calophyllum inophyllum	7	0	7
Hernandia moerenhoutiana	4	2	6
Excoecaria agallocha	1	5	6
Ochrosia oppositifolia	5	0	5
Adenanthera pavonina	5	0	5
Santalum yasi	3	2	5
Rhizophora spp.	2	2	4
Vitex trifolia	1	3	4
Grevillea robusta	3	0	3
Ellatostachys falcata	3	0	3
Ficus sp.	0	3	3
Gyrocarpus americanus	2	0	2
Decaspermum fruticosum	2	0	2
Diospyros laterifolia	2	0	2
Syzygium neurocalyx	2	0	2
Hernandia ovigera	1	1	2
Garuga floribunda	0	2	2

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Table 52. Continued.

Scientific Name	Nuku'alofa	Rural	Total
Rhus taitensis	1	0	1
Cerbera manghas	1	0	1
Pritchardia pacifica	1	0	1
Albizzia lebbeck	1	0	1
Salix sp.	1	0	1
Xylosma orbiculatum	1	0	1
Pittosporum arborescens	1	0	1

241 are an integral part of the Tongan agricultural system and constitute a valuable source of staple and supplementary food crops and numerous other valuable plant products. In the Nuku'alofa area, there seems to be much more intensive cultivation or protection of short - term food crops and other non - food plants. No appreciable difference in the frequency of cultivation or protection of valuable trees species between the Nuku'alofa and rural town allotments was found.

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241 range of subsistence products.

241 The average town allotment generally has at least one
35 main dwelling or sleeping house (fale mohe) plus a number
[342] of other structures, such as separate kitchens (peito),
[343] wash houses (fale kaukau), outhouses (fale vao), and in
[369] some cases pig sties. On a majority of the town allotments in Nuku'alofa, and to a lesser extent in the rural villages, fences were found around the entire allotment or around
[417] portions used for keeping livestock. Fences for livestock
[245] were usually of barbed wire. Those which were more ornamental or used to delineate property boundaries were often living fences or hedges, most commonly of Hibiscus spp.
241 and Nothopanax spp. Wells, rainfall catchment systems, and
312 private water pipes were common on town allotments in
369 Nuku'alofa. In the rural areas, water was generally obtained from centrally located village water pipes.

241 Within this setting, a great variety of livestock,
231 staple crops, and other valuable plants and trees were found. Almost all allotments had some livestock; over half had chickens, dogs, and pigs, while horses, cats, ducks,
241 goats, and cattle were found on several. In Nuku'alofa, the
231 law prohibits pigs and other animals except poultry roaming
369 free. On rural town allotments, however, over half of those sampled had loose pigs. These constitute a major deterrent
241 to the cultivation of certain crops. Staple crops were
369 cultivated in limited acreages on about half of all town

241 369 allotments in the urban area of Nuku'alofa but to a lesser extent in the rural villages. The most common staple crops found included swamp taro (Colocasia esculenta), American taro (Xanthosoma spp.), giant taro (Alocasia macrorrhiza), and bananas (Musa sapientum), plantains (Musa paradisiaca), and the pata variety banana (Musa sp.), none of which are usually planted as commercial crops on town allotments. Of lesser importance on town allotments were manioc, yams, and sweet potatoes. Swamp taro, which was not as important on bush allotments, was the most frequently planted crop on town allotments, especially in Nuku'alofa.

241 There was also a great range of supplementary food crops and valuable non-food plants that were cultivated and/or protected. The most common of these were chili pepper (Capsicum frutescens), edible hibiscus (Hibiscus manihot), sugar cane (Saccharum officinarum), si (Cordyline terminalis), kava (Piper methysticum), pineapple (Ananas comosus), passionfruit (Passiflora maliformis and P. edulis), lemon grass (Cymbopogon citratus), and grenadilla (Passiflora quadrangularis), introduced vegetables such as tomatoes (Lycopersicon esculentum), pumpkins (Cucurbita pepo), and eggplant (Solanum melongena). Of the 28 different useful non-food plants found on the town allotments, the most common were species of Pandanus, Gardenia jasminoides, Gossypium brasiliense, and Coix lachryma-jobi. Both supplementary food plants and non-food plants were much

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369 more frequent in Nuku'alofa than on the rural town allotments.

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245 The most impressive vegetational feature on town allotments was the great range of valuable tree species that are cultivated and protected. These included over 75 different species, some of which were found on a majority of all town allotments. The most frequently occurring species were fruit trees such as breadfruit (Artocarpus altilis), mango (Mangifera indica), coconut (Cocos nucifera), tava (Pometia pinnata), and citrus trees (Citrus spp.). Some of the more important non-fruit trees included Plumeria spp., Hibiscus tiliaceus, Aleurites moluccana, Ceiba pentandra, and Pandanus tectorius. There seemed to be no marked difference in the frequency of occurrence of these trees between Nuku'alofa and rural town allotments.

[369]

241 Fallow or secondary vegetation was almost non-existent, except where there were uncut weeds or poorly maintained gardens. Most areas not occupied by structures, cultivated plots, or trees generally consisted of mowed or cut weeds which served as a lawn.

[351]

The town allotments, especially in the urban area of Nuku'alofa, seemed to constitute a very important source of food and other subsistence products. The range of crops, protected plants, and trees is similar to that found on bush allotments although town allotments have more recent introductions than bush allotments. And finally, livestock

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241 And finally, livestock
369 husbandry was much more widespread on town allotments than
231 on bush allotments.

241 Current Trends and Developmental Paths

178 Based on the nature of the Tongan agricultural system in 1971-72, there seemed to be some definite trends within the system and developmental paths that it might follow, all of which should lead to more intensive use of the land and increased productivity. Some of these trends or possible developmental paths include:

241 Decrease in Leasehold Land and Expansion of Bush and Town
178 Allotments

423 As leases expire, many are not being renewed and the
[427] land is in some cases being subdivided into bush and town allotments. More recently, bush allotments are often four acres in size and town allotments less than one-quarter
241 acre. The existence of these smaller allotments should
178 lead to more intensive cultivation, as was the case with most of the sampled undersized allotments.

Increase in Scientific Farming Methods

[654] As a result of government encouragement and subsidies,
[242] there seems to be a definite increase in plowing and disc
[312] harrowing; the use of pesticides, fungicides, herbicides, and fertilizers; the introduction of new crop varieties; the use of fencing; and dependence on some form of irrigation.

241 178 464 Increase in Wage Labor

Owing to the increasing need for cash, the growing labor pool, and the number of allotment holders who have wage-paying jobs, there seems to be a definite increase in the number of households employing wage-laborers to work on their allotments.

000 Increasing Cultivation on Town Allotments

As the pressure on land becomes more acute, dooryard gardens on town allotments will probably have a greater role in supplying the subsistence needs of the Tongan people. This trend is already evident in Nuku'alofa, where [241] [369] dooryard gardens trend to be much more highly cultivated than those in the less populous rural villages.

Increase in Permanent Dwellings on Bush Allotments

[423] Owing to the limited number of town and bush allotments, the inability of all eligible land holders in a given family to have legal rights to bush allotments, and the improved transportation system, there will probably be an increase in the number of households living permanently on the bush allotments, and a concomitant intensification of agricultural activities on these allotments.

244 178 Increased Cultivation of Non-Traditional Staple Crops

Because of their ease of cultivation and ability to grow on more impoverished soils, there has and will continue to be an increasing dependence on manioc (Manihot esculenta), American taro (Xanthosoma spp.), and sweet

/20 cont./

sexual explicitness. (14)

14. Cf. even J. Martin loc. cit. II. p. 177. Lighthearted--and [capable of being] untroubled--that is the impression the observer has to this day, of the majority of Tongans.

/21/ Courtesy within the village community /15/

15. See also Farmer, loc. cit. p. 150.

on the smaller islands has scarcely diminished. In a place like Nuku'alofa, however, because of the larger number of people (about 5000 inhabitants) and the gradual urbanization (motor traffic, shops, etc.) a certain measure of estrangement has taken place, though any Tongan inhabitant can come uninvited to any other for a meal. Here one may notice that in general only the old people greet a European passing by. A certain relaxation of good manners, especially among the young Tongans in the major towns, is largely attributed to the influence of the foreign troops stationed on Tongatapu during the last war, (16)

16. The negative influence of foreign troops through money surplus, in part bad personal examples and incitement to acts which were unknown to the Tongans or seemed morally intolerable (selling and usury where formerly one gave and made presents, theft, i.e. procuring something in devious ways, drinking and methods of producing alcohol, prostitution).

particularly the presently rather frequent theft. (17)

17. At the time of foreign troops you could often get many things effortlessly; some Tongans with "freer" attitudes thus tend to obtain, likewise "effortlessly," desired articles where a purchase or at least a request is customary.

However, such property offences have by no means become widespread even in a seaport like Nuku'alofa (18)

18. The only rooming house in Nuku'alofa has unlocked rooms and closets!

/281 cont./

829 177 [186] whites only what seems good to them and are by no means uncritical--insofar as circumstances make criticism possible for them. Faced with the superiority of European materials and the European mind they maintain ease and equanimity.

/282/ To be sure, most Tongans feel that their way of life is poor compared to the high material and intellectual standard of Europeans. [565] But they accept this as a fact and do not seem burdened by it, especially since they are all, nobles as well as commoners, on the same level and actual comparisons with the European way of life are very rare or indeed quite impossible.

829 177 178 The majority of natives are not at all aware of the fact that their culture is no longer pure and aboriginal, but rather a mixed culture which contains much that for the Tongan is actually useless and merely "imitation." There is no resigned looking-back to ancient Tongan culture and history, (760)

[969]

760. The ruins of grave sites (tombstones, "langi") of the ancient Tongan supreme rulers (Tu'i Tonga) at Mu'a/Tongatapu are for the most part overgrown. and in the midst of two old stone monuments on the island of Nomuka/Ha'apai there is even kape planted.

but rather affirmation of the present and anticipation of the future. (761)

761. Only a few chiefs regret the decline of those customs which once stressed their social rank so clearly.

Many natives, however, have the painful feeling that the Tongan can never become "like the European." Very few conclude, on the basis of this, consciously to preserve their ancient Tongan cultural heritage alongside the adopted European /culture/ and to unite it with the latter. The majority of the people, however, do this quite unconsciously.

[184] [369] There is a certain difference between the attitude of the population

/282 cont./

829 184 369 177 178 in the villages and the seaports. The Tongans of the village settlements, especially on the small islands, seem to be passive. They approve of the development, they have a certain pride in their admiration and respect for the competence and the mind of the whites, even though they remain self-assured. The "urbanized" Tongans living in the principal towns have somewhat more contact with Europeans and their world, and are more lively and flexible. They too take an affirmative attitude toward the development because they see its necessity and its usefulness, and they are always interested in learning from whites. Yet they do not necessarily believe in the unselfishness and sincerity of all Europeans, but often critical of them. Many value the whites merely as advisers and teachers who open up for Tonga the material and technical facilities of Europe and who can also develop education, hygiene and administration to such an extent that the standard of the small kingdom can be raised and it can assert itself in the world; they reject a leadership role of [186] Europeans. These natives often show a rather marked patriotism; they are proud of their own small kingdom and of /283/ the fact that their Archipelago is the only one in the Pacific that has remained an independent state. Some of them are anxious to increase the political freedom of their country.

829 177 178 [186] In general, therefore, it may be said of the Tongan attitude toward their development that scarcely anyone longs for the past, for the ancient Tongan way of life. Many realize the value of their own culture and point to it with a certain pride, and some also try consciously to preserve it. But on the whole they willingly and happily affirm the progressive change of Tongan culture and only unconsciously impede it by certain conservative tendencies and a pronounced inclination towards equanimity.

/287 cont./

177 178 influences brought about a major change in the area of traffic. New professions, the development of trades and the use of money are further evidences of change in the economic life of Tonga.

The religion of these natives--except for a few insignificant remnants--was obliterated and replaced by the Christian faith.

The art of the Tongans seems very much changed, for song, instrumental music and poetry have been strongly influenced by Europe, and the ancient Tongan dance has largely disappeared from public life. The present-day games of these natives have almost all been borrowed from whites.

Knowledge and with it the islanders' image of the world are today decisively determined by European school-learning.

177 178 184 369 In various areas of daily life the cultural change is uniform throughout the Archipelago; in others, however, there is a certain difference between the seaports and the villages, as well as between the larger islands (Tongatapu and Vav'u) and the smaller ones (especially of the Ha'apai group), where a more "indirect" Europeanization (through Tongans as intermediaries) has taken place.

In the urbanized harbor towns there are more European and European-style influenced houses. Some of the streets are paved and are used by motor cars. Here there are some business sectors (department stores) and offices with files, telephones and typewriters. The natives may visit cinemas and buy ice cream. There are some whites living in these districts.

Despite the still strong community feeling, the Tongans living in the seaports seem to have experienced a slight measure of individualization and alienation among themselves. Here one naturally sees more fully European dress (trousers) than on the smaller islands, and the natives have become more accustomed to European supplementary foods

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(including bread) and a third meal. These Tongans seem somewhat more efficient; they make use of the postal and telegraph service with a certain matter-of-factness, and in case of illness they are more apt to go to hospitals. Here also, thinking in terms of money has found more acceptance than in the villages.

Though the ancient Tongan manners and customs that have been retained seem to be taken somewhat more lightly in the urbanized seaports, it is noteworthy that the "Tongan wedding," for example, has been preserved here almost as it is on the small islands, and that the right to take what belongs to the mother's brother (tu'asina) is still largely practiced. In these towns, especially, people also still like to wear /288/ the vala and respectfully to don the ta'o-vala (3)

3. See pp. 67-71.

when they attend a fono (4)

4. Gathering to announce government reports.

or wish to visit a chief.

In these settlements, tapa is still made even in the center /of town/, near the main thoroughfare, and most of the Tongans living here still carry on their planting, some of them along with their professional work.

The natives of the urbanized settlements and the smallest islands of the Archipelago adhere equally to their Chrisitian faith.

In general it may be said about the differences in cultural change within the Archipelago that many changes have been greater in the seaports (and on the larger islands) than on the small islands of the group. But even in those "urbanized" settlements they are not so great that one could speak of a complete "break with the past." Despite the stronger Europeanization of the harbor towns, essential ancient Tongan ways of life have remained there. We might rather speak of a

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/288 cont./
"uniformity of cultural change with a certain margin of fluctuation" throughout the entire Archipelago.

Seen as a whole, the cultural change in Tonga has brought no collapse of the old way of life of the natives. It should rather be regarded as a steady development during which the previous order was modified and new values (along with the existing old ones) became the substance of life. The material and cultural loss caused by the change was replaced by something new--to the extent, at any rate, that for the modern Tongan men and women who were, after all, born into this development, the essential phases of which were long since completed, there was no noticeable gap. Rather, we see today a firmly established state and community in which almost everyone feels comfortable and secure and does not have any particular cares and privations; life for the majority of the people is even more worthwhile than it was in the past, while the nobility does not quarrel too much with its readjustment, the basis for which was already laid two generations ago.

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The necessary "adjustment change" resulting from the "change of circumstances" was all the easier for commoners because their traditional family and community life and their livelihood (from planting, domestic animal-raisng and fishing) scarcely changed in the villages, and because the change in religion was more an "exchange in a superior force that commanded respect," and because in many areas new and old attributes in a fortunate fusion. The nobility who, as a result of Christianization and democratization of the islands, lost considerable power, accepted what seemed unalterable, /289/ especially since, on the whole, it still enjoys a certain respect--at least formally--and also occupies the most important key positions in the government.

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The life of these natives shows no particular restlessness or tension, but rather a considerable balance of factors. The Tongans seem

S T 871 /298 cont./ schools of five missions) is less effective than the Tongan, and mass education has not as yet been particularly successful, especially since in West Samoa (with a majority of the population) there is no compulsory education and in all the villages of the Islands the existing schools are attended rather irregularly. Even though the so proud and conservative Samoans do not have the same ambition to become S T [180] educated that the Tongans seem to have, it is nevertheless noteworthy S [212] that today almost all Samoans can read and write. In comparison with Tonga, however, only very few get beyond the elementary school level.

S T 177 178 184 369 /299/ In Samoa, as in Tonga, there is a difference in the change that has taken place in the culture between the more remote villages and the settlements favorably situated with regard to transport facilities and the commercial centers. In these "urbanized" towns one often notices in an occasional outsider who come there a detachment from his "extended family" in addition to a slight alienation and a growing importance attached to money, and the way of life of some natives shows considerable change in clothing, food and dwelling. In the city of Apia some people, especially young natives, are at times disdainful of the ancient Samoan way of life and the customs of their fathers, and feel superior to their countrymen who come "from the most backward villages" for a visit.

However, at present, such manifestations can be observed only among a minority of Samoans and should be regarded as exceptions. Up S 177 178 to now the Samoan culture has shown itself to be at least as strong as the Tongan. It has remained sound and dominant, despite the variety of European influences. (23)

23. Even the large sums of money which came into the country as a result of the presence of American troops on the Islands and the possibility of easy acquisition during that

100: Koch--469 E-4,5 (1951-1952) 1955 OU9 Tonga OU9
Fijians OQ4

I F 871 182 F (113) T F 184 369 177 178 F 184 369 177 F [181] F [166] F 177 178

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37. Legislative Council, Fiji. Secretary for Fijian Affairs. Annual Report, 1948. Council Paper No. 27. p. 8.

The difference to be observed in Tonga in the culture change between the more remote villages, on the one hand, and the towns favorably located with respect to transport facilities, on the other, is, of course, to be noted to an increasing extent in the Fiji Colony. The rapid development of overseas contacts and the founding of industries influence the lives of those who dwell in or near important centers. In the urbanlike settlements, especially in the lowlands of Viti Levu, the culture of the Fijians is subject to the greatest influence, and the difficulty of "uniting the two worlds" (which here are actually four because of the Indians and Chinese living here, besides the Europeans) is greatest for the natives in these places. Here one also notes a beginning individualism among the natives; yet in general the Fijians who have developed an especially successful initiative show toward their own people /312/ neither greediness nor stinginess, characteristics which scarcely existed in their old native community. In the villages near these centers a certain unrest has arisen through the exodus of young people who could not resist the power of attraction of the urbanlike settlements.

Seen as a whole, there has been no breakdown in the old style of living on the Fiji Islands. After the restless times of the 19th century resulting from the intervention of Europeans, and after the alarming drop in population a notable, continuous positive development began which is not very different from that which took place in Tonga. In comparing the culture change in Tonga with the change in Fijian culture it is noteworthy that, despite the stronger and more powerful influence brought to bear on the latter by foreigners, so much essential age-old tradition in the social life and the means of

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

000 expanded agricultural base and a program of commodity imports from nations still producing a food surplus; or (3) approach a level of population at which point natural controls (i.e., malnutrition and/or starvation) set in to bring the population into balance with the supporting capacity of the land.

166 178 [369] In addition to the basic difficulty of population-food imbalance, Tonga must also contend with the physical shifting of its population from rural to urban settings, and the economic shift of elements of the population from a traditional subsistence agriculture to a cash economy. Both of these changes in the character of Tongan population tend to aggravate the overall population-food and agricultural imbalance.

369 171 Rates of urbanization in the entire South Pacific region are among the highest in the world, when considered as a percentage of total population. If one includes the nations of Australia and New Zealand, the peoples of the South Pacific are the most urbanized in the world on a proportional basis (Urban Problems in the South Pacific, 1967, p. 2; Urbanization in the South Pacific, 1962, p. 1). Tonga, since the end of World War II, has seen rapid growth in its capital city, which has nearly tripled in size.

369 [182] This changing characteristic of the population has in itself had a significant impact on the natural environment of Tonga. In addition, as urbanization continues to expand, social issues including housing, public health, and sanitation grow proportionally. [312] As in most other island environments in the South Pacific, water for

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

369 drinking and sanitation remains, at best, in a precarious balance
182 with growing urban population.

178 The process of urbanization has several causes which are
[179] significant in the framework of this research. Since the mid-1960s,
[171] the development of tourism, and its associated activities, have been stressed in the developmental plans of all island governments in the Southwest Pacific. This has had two immediate results in
178 Tonga. First, many individuals within the agricultural sector of
166 the population have given up their subsistence agricultural activi-
369 ties and moved into urban centers hoping to secure cash employment
[464] in handicraft or tourist related activities. This is particularly
178 the case in Nuku'alofa, Tongatapu and Neiafu, Vava'u. This movement
369 has not only rapidly increased the urban population but has also
433 decreased the total acreage in agricultural production, or changed
[241] production from food crops to cash crops. Others of the rural population, who remain on their farms, often devote increasing amounts of time to the production of craft items. However, because of the rate of expansion in Tongan population, total rural population has continued to increase. Therefore, as rural population continues to grow, agricultural food production is decreasing and urban population is rapidly expanding.

369 The second important result of urbanization, without con-
178 sidering the social and cultural impact, is the growing reliance
439 upon imported foods and urban oriented materials (Horine 1967, p. 43). As urban population increases and agricultural production of foodstuffs proportionally decreases, food imports become necessary.

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Many, though not all, of these imports are of little nutritive value and may be actually detrimental to the health of the people. In Tonga, for example, a recent French survey of the capital city revealed a dramatic increase in the consumption of high energy foods, such as sugar, alcohol, and highly processed foods. As a result, the French study concluded, there was a rapid rise in the incidence of dental caries within the Tongan population, accompanied by a general decrease in the overall nutritional status, especially among preschool children (Hansell 1962).

This is not to imply that all food imports are of little nutritive value or that Tonga should strive to achieve self-sufficiency in food production. However, it is clear that some form of control, governing the quantity and quality of certain foods, should be considered. Such action should be aimed at improving the quality of imports, including flour, meats, and grains. Consideration of the nutritional status of urban populations is advisable in view of the rapid expansion of this population segment and the increasing utilization of imported foodstuffs.

The economic shift of the populace is another major cause of urbanization. This shift has been most notable in the agricultural sector of Tonga's national economic structure. The effects upon agriculture are felt in two significant areas. As alternatives to agriculture are found in cash employment in urban areas, the cash income of the people involved increases and imported foods, often seen as status symbols, are sought as such. Therefore, the per capita urban demand for indigenous foodstuffs tends to decline,

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

if imported foods are available and cash is on hand with which to purchase them (Horine 1967, pp. 43-46). In addition, as the possibilities of cash employment in urban areas increases, the population is less inclined to work their traditional urban gardens. Rather, they prefer to raise their visible socioeconomic status through the use of imports. This subsequently reduces further the amount of foodstuffs produced in the nation.

In rural areas of Tonga, major portions of the remaining agricultural sector are changing to a cash orientation. The government requires a substantial portion of a farm holding to produce export products (or at least be planted in such), principally coconuts or bananas. However, many farm plots are totally devoted to the production of crops for export (Kennedy 1961, p. 61). Major cash crops include copra and sweet banana, which together account for 80 percent of Tonga's exports. As is the case in urban areas, as the cash income of farmers increases, the incentive for producing agricultural food staples decreases. This situation will probably continue as long as market prices for Tongan exports remain high and the status associated with material products, including imported foodstuffs, exists.

Therefore, one may hypothesize that as Tonga's population continues to increase, urbanization will increase, agricultural production of foodstuffs per person will decrease, the dependency being placed upon food imports will continue to grow, and the nutritional status of particularly urban populations will probably decline.

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

621 activity, being second only to the family in social unity. Even
621 within larger urban areas, village characteristics remain. The
369 capital, Nuku'alofa, still retains social divisions based on older village distinctions. For example, sections of the capital, such as Kolomotu'a, exhibit aspects of the former village social structure.

361 The 1966 census of population lists 152 villages within the Tongan Kingdom (Fiefia 1968, p. 39). The location of the majority of these villages is within a half mile of the sea, with relatively few being found within interior areas. The explanation for this distribution involves consideration of the insular nature of the nation, as well as the significant role the reefs and sea play in supplying the Tongan diet with protein. During the civil war period, the fortified structures were built on hills to facilitate strategic defense. For this reason occasional villages, built upon old fortress sites, are today located on inland elevations. This is most often the case in Vava'u (i.e., Feletoa, Mataika, and Leimatu'a).

621 All Tongan villages are similar in social character, with
369 differences stemming only from size. Larger villages are more urban
[368] oriented, and exhibit such recreational facilities as motion pictures, pool halls, and social halls. However, most Tongan villages number fewer than 400 total inhabitants, and have few distinguishing characteristics.

361 Some of the larger villages represent an amalgamation of two or more settlements which, following a period of expansion, joined together forming a cluster or elongated configuration. Nuku'alofa

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

361 represents such an occurrence. Historically, the formation of this city resulted from the merger of three villages, Ma'ufanga, Kalamotu'a and Kolomofu'ou, during the reign of Tapou I. Following rapid urban population growth and expansion of settlement along the major transportation routes of the city, Nuku'alofa has recently incorporated other nearby villages such as Longalonga, Fasi, Fanga, and Maile'taha.

369 The Tongan Minister of Lands has classified only four Tongan towns as being urban areas: Mu'a, Nuku'alofa, Pangai, and Neiafu. The latter three are the capital cities of Tongatapu, Ha'apai, and Vava'u, respectively. Mu'a, which is located on Tongatapu and is Tonga's third largest city, historically represents the seat of Tongan power. (It was also the site of Cook's landing in the eighteenth century.) Mu'a today, however, is economically and socially overshadowed by Nuku'alofa, which is 11 miles away, and therefore has retained the function and appearance of a large agricultural village. In other words, it exhibits few of the economic and political functions which characterize Nuku'alofa, Pangai, and Neiafu.

While there is no uniform definition of an urban area nor a standard of measurement, within the Pacific Islands, the Urbanization Advisory Committee of the South Pacific Commission has established several applicable characteristics:

1. a noticeably heavy concentration of population in comparison to the surrounding areas,
2. an occupational distribution differing from the surrounding area, with a larger proportion engaged in non-farming pursuits,

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

369 3. a form of local government different from that of rural areas, as being more suited to the provision of necessary urban services, made possible by greater population concentrations and financial potential (Urbanization . . ., 1962, p. v).

Nuku'alofa is Tonga's center of economic and social activity. 369 The urban area houses a rapidly expanding population in excess of 162 20,000, and has spread along the major transportation routes to the 361 point where it has overtaken surrounding villages and formed a 1.5 mile arc, radiating from the waterfront. The population density is greatest along the peripheral edge of the city's central business district, and along the major transportation routes leading into the 369 city. As the nation's capital, Nuku'alofa contains the majority of governmental divisions, including the royal family and all major ministerial departments. Although Pangai and Neiafu are also capitals, of Ha'apai and Vava'u respectively, they are greatly overshadowed by Nuku'alofa.

Pangai, the capital of Ha'apai, exhibits fewer of the urban [162] characteristics found within Nuku'alofa. Smallest of the four Tongan cities, Pangai evidenced a decreasing population during the intercensal period of 1956 to 1966. However, within the Ha'apai island group, Pangai remains the focal point of governmental, social [368] and economic activity. The recent construction of the Ha'apai airfield, and the development of tourism, is expected to forestall further declines in Pangai's population.

Neiafu, capital of Vava'u, is second only to Nuku'alofa in terms of commerce and economic development. Neiafu not only serves as the administrative center of Vava'u, but is rapidly becoming the most important tourist center in the Kingdom.

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

369 Considering the urban characteristics set forth by the South Pacific Commission as being applicable to the Pacific islands, it becomes apparent that the cities of Pangai, Neiafu, and Nuku'alofa can be defined as being urban centers. In the case of Mu'a, though larger than Pangai in terms of population, the lack of such urban characteristics as government, commerce, and economics eliminates it from urban classification, under the South Pacific Commission's definition.

162 795 873 874 [162] Other population groupings of significance include church training facilities and schools. The most important of these are Salote College and Toloa Methodist Training College, sponsored by the Wesleyan Methodist organization, and Liahona High School, sponsored by the Church of Jesus Christ of Latter Day Saints. Each of these include several hundred students and staff, many of whom live in housing provided by the respective schools.

874 162 Other groupings to be considered within this classification are the training camp for the Tongan defense force and the police training facility, both on Tongatupa. The population of these two facilities, though largely transient, must be recognized.

161 128 161 128 127 161 127 The historical growth of Tongan population can only be estimated through calculation of approximate numbers supported by approximate tillable acreage. Therefore, figures representing the population prior to the first census (1921) reflect educated guesses supported at times by missionary estimates and head counts (Walsh 1970, p. 31). In addition, none of the censuses prior to 1956 can be considered to be entirely reliable. McArthur stated that

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

accessible and abundant sea resource. This is true of western Tongatapu and the western sides of the Ha'apai islands, with the reefs of inner Ha'apai being the most productive.

Urban areas are by definition high density zones, and therefore need not be defended as such. However, urban density can be examined in relation to size of housing units within the islands. The average size of the Tongan household, as reported in 1966, included 6.7 persons. Recently collected data indicated no significant change in this level. However, the census reported nine villages with households averaging eight persons, and four villages which averaged over nine persons per household. Most of these were located on Tongatapu. Similarly, recent study indicated the average household size in Nuku'alofa to be 7.96; Pangai, 7.55; and Neiafu, 7.42. In addition, more than 63 percent of those households containing three or more nuclear family units were located on Tongatapu.

High density rural areas may number more than 2,000 persons per square mile, as in some parts of Ha'apai, while urban densities may be much higher. The average density of the population on inhabited islands, in 1966, was approximately 375 persons per square mile. This represented an increase in overall density per square mile of nearly 100 persons, from 1956 to 1966. However, these statistics are of little significance, unless considered in relation to the Kingdom's available human, natural, and agricultural resources. The following sections, which treat land tenure and agricultural exchange, will rely heavily upon an analysis of these resources, and their critical interrelations within Tonga.

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

CHAPTER VI

AGRICULTURE TO URBANIZATION

369 171 Urbanization and its effects are issues confronting all the governments in the Pacific Islands. Of the principal Polynesian cities, only Pago-Pago in Eastern Samoa evidenced a decrease in urban population between the mid-1960s to 1975, a result of migrations to Honolulu and San Francisco. The remaining cities of the region are coping with the increasing numbers of individuals 121 migrating from villages and rural areas. Thus, urbanization, as defined by the South Pacific Commission and applied to Tonga (see pages 21-22) must be examined in relation to those factors motivating population movement from rural to urban centers. A fallacious assumption examines urban growth as a product of the city when, in fact, "it must be viewed as stemming from forces 369 working on the whole of society" (Harr'e 1973, p. 11). Urbanization in Tonga results from both urban and agricultural societal forces. Although three urban centers in Tonga are recognized, Nuku'alofa exemplifies the process of urbanization in Tonga and will be used as a model in the following discussion.

369 162 161 The steady and accelerating growth of Nuku'alofa, particularly notable in the past 40 years, has been generally an uninterrupted process. In 1937, the capital contained 4,000 inhabitants.

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

369 By 1956, this figure had increased to 9,200, and by 1966, to nearly
162 16,000 not including surrounding areas. Today, Nuku'alofa,
161 including the adjoining settlements, contains between 25 and 30
369 thousand persons. This number represents approximately half of the
162 population of Tongatapu and a quarter of the nation's total population.

369 Nuku'alofa is not unique in these respects as many of the
171 same features of growth are common throughout Polynesia. However,
[166] unlike other Pacific cities, Nuku'alofa is almost totally unprepared to absorb the continuing flow of 600-1,000 new inhabitants per year.
369 The city lacks strong local government and laws, contains inadequate
[364] water and drainage facilities, refuse collection, and sewage systems,
[464] all necessary for coping with a sizable population. In addition, there are few opportunities for steady urban employment and, therefore, many persons are underemployed semi-subsistence agricultural workers dependent upon the production of others.

369 In these respects, one could justifiably argue that
361 Nuku'alofa is not an urban settlement, in the true sense, but merely an agglomeration of three agricultural villages (Kolomofo'ou,
[368] Ma'ufanga and Kolomotu'a). The merging of these three villages into one urban area resulted from the establishment of the royal seat of power and the Wesleyan church headquarters at this location, plus the fact that Nuku'alofa was Tonga's first international
369 port. The urban center of Nuku'alofa remains highly agricultural
[368] in nature. The city has acquired few new facilities other than
[166] those usually associated with administration and trade. Three

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

369 factors have been major forces motivating the migration of rural
166 residents into Nuku'alofa. Employment opportunities are available
369 to some individuals who have friends or close relatives already
166 employed, an attraction to potential migrants. However, surveys of
464 migrated urban residents indicated that only two percent had moved as a result of acquiring urban employment. In addition, cash income earned by this same group from urban employment was only a small proportion of total earnings. However, most agreed the possibilities of increasing their cash income were greater in Nuku'alofa than in rural agriculture, and that infrequent part-time employment was preferable. Government-owned services and operations represent the greatest source of urban employment, although church and privately sponsored work (i.e., teaching, housekeeping, and miscellaneous part-time labor) also exists.

369 A more significant factor, motivating migration to urban
166 areas, is rather vaguely defined as "urban attractiveness." In the case of Nuku'alofa, the excitement and variety of town life is
[517] especially attractive to younger age groups. Social clubs, dances, sporting events and other amusements, including the seemingly endless opportunities for kava, make village life appear to be comparatively dull to individuals confronted with daily agricultural and
[554] domestic chores. In addition, urban living is a symbol of prestige, indicative of a higher living standard. Young men most frequently migrate for these reasons although women are not to be excluded.
369 This has resulted in a large number of unemployed and underemployed
464 urban youth, characterized by young people loitering in the market
461 areas and in amusement facilities.

101: Clark K-4,5 (1974) 1078 OU9 Tonga OU9

areas and in amusement facilities. This situation is often blamed for the rapid rise in crime in Nuku'alofa. Burglary is the most frequent offense, although the incidence of fighting, prostitution, and petty theft have recently evidenced significant increases. Subsequently, this continuous migration of young Tongans has become a concern at all levels of government in the Kingdom (Report of the Department of Justice 1973).

The most influential urban factor attracting rural individuals to Nuku'alofa is the opportunity of improved education. Nearly all of the secondary schools are on Tongatapu and most of these are in Nuku'alofa. The fact that substantial education is usually unnecessary for village life, and that there are few opportunities for gaining urban employment, is of little consequence in deterring this desire. As mentioned previously, families often entirely abandon their village residence in order to move into the city and acquire a better education for the children. Frequently, this migration is intended to be temporary. However, as the older children finish their education, the younger children begin. In addition, the older children often marry and, as a result, permanent residency is established. Tongans perceive education to be symbolic of prestige, even though the knowledge gained will be put to little use. Educational attainment is considered to be the simplest and most direct means to upward social movement.

The rural factors contributing to expanded urbanization are almost entirely related to the system of land tenure and agriculture. Pressure of population upon land resources has been shown to exist [i.e., the high incidence of unemployment among youths in urban areas--Analyst.]

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

166 241 161 in varying degrees throughout the Kingdom, though it is greatest in Ha'apai and portions of western Tongatapu. As population pressure increases and maintaining a living through agriculture means becomes more difficult, migration from these regions can be anticipated. 241 Related to this issue are the decreasing agricultural yields resulting from lower fertility levels, shorter fallowing periods and the [166] expansion of cash cropping. When cash cropping profits become substantial enough to support a given household, independent of large scale home food production, the motivation for migrating to an urban area is high. Such migration results in absentee landholding and the utilization of friends or relatives to harvest the cash crop. Thus, agricultural acreage is removed from domestic food production, and 369 51 allocated to cash crop production. The cash earnings are used to maintain the household in the urban environment. Consequently, the family experiences an increased dependency upon a greater proportion of foreign imports in order to satisfy its food and material 369 needs. The effects of this are currently being felt in Nuku'alofa, 433 a direct result of too many urban consumers being served by too few [457] rural producers. The Kingdom is operating under an increasing trade deficit in order to supplement native food production with imports (Table 20). A Eventually, this will necessitate major adjustments in the national economic profile.

369 Migrating to an urban area such as Nuku'alofa often increases 554 the social position of the household. Urban living is perceived as [166] being synonymous with an improved standard of living, while agricultural employment is considered to be a lower prestige occupation.

A [See Category 457, p. 124--Analyst.]

[TEXT CONTINUED ON PAGE 125]

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

464 A survey of employment preferences indicated that 83 percent of the respondents preferred to remain in agriculture. However, this response was given for one or both of the following reasons: (1) agricultural employment was preferred to unemployment, and/or (2) agriculture was perceived to be the only employment opportunity available to the interviewee. Several respondents stated that if they were given urban employment, they would abandon farm work, even if it meant a minor reduction in cash income.

121 It is not the purpose of this research to present an indepth analysis of Tongan urban environments. However, mention of the more 369 fundamental issues is appropriate. In the future, in addition to limited opportunities for employment and a steadily increasing crime rate, the urban officials will have to contend with inadequate housing, expanding squatter sections and increasing public health problems resulting from the lack of adequate sewage and refuse disposal.

More significantly, the entire migratory process evidences 369 a weakening of traditional Tongan social and cultural norms. Fre- 596 quently, the movement of households to the urban area disrupts the 593 traditional extended family system. Although family ties are never [594] severed entirely, there is a distinct transition from the system of extended families evident in small rural villages, to the nuclear [591] families found in larger villages and urban areas. However, in [166] instances in which extended family ties are maintained, an urban family may anticipate the eventual arrival of rural relatives. The new arrivals reside with the established urban household until

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

369 596 593 591 166 employment is found or a means of establishing a new urban household is secured. At this point division is accomplished and the newly urbanized family becomes another potential host to migrating relatives. This system with its chain nature of migratory urbanization was observed in many of the surveyed urban households.

369 166 Thus, migration to urban areas has been in response to economic and social pressures for education, employment and the prestige of urban living, plus a lessening attachment to the traditional village life style. Therefore, migratory trends are indicative of cultural and economic changes in Tonga, which are expected to continue.

436 178 With the development of cash cropping and a greater dependency being placed upon a cash economy, money has become an essential to the average Tongan. Not only is it needed to meet social obligations (i.e., education, taxes and church contributions) but it is also increasingly important in satisfying the basic subsistence 178 needs of both rural and urban residents. The desire to increase 241 cash income has altered the agricultural pattern of the nation 182 from traditional to cash cropping, thus eliminating a dependency upon the land for production of food and material necessities. [458] [73] These changes have been facilitated by fluctuations in post-World War II copra prices, and such natural disasters as drought and hurricanes.

369 166 [464] While Nuku'alofa does not offer full-time employment to most migrants, there remains the possibility for part-time labor, sufficient to meet the minimum cash requirements. Thus, urban

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

369 166 migration in Tonga is not only closely tied to a desire for social mobilization, but also to fundamental economic changes. The urbanization process has, therefore, been encouraged by conditions in both the urban and rural environments of Tonga. A variety of factors have been influential, with each part acting to accelerate [554] the whole. The role of social status and prestige in everyday Tongan life motivates the continuation of these transitions resulting in the potential social and economic disruption of the Kingdom.

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

CHAPTER VII

NUTRITIONAL IMPLICATIONS OF CHANGE

369 Investigations in Tonga, presented in the previous chapters, indicated that agriculture, land and population are major contributors to the urbanization process. There remains to be discussed the fundamental subsistence of those residing within the urban environment. Public health, housing, water supply, waste disposal and disease vectors are only a few of the problems encountered in 121 massive urbanization. However, of particular interest to this 146 research are those factors altering the nutritional patterns of the urbanite. Specifically, the degree of nutritional gradient between rural and urban populations is perceived to be important and an issue largely neglected in considerations of Pacific island urbanization.

146 At present, the Tonga Islands are relatively devoid of recorded malnutrition, when compared to selected nations of Africa, 178 Asia and South America. However, a pattern of development in 146 Nuku'alofa, similar to the urban centers of other regions, is becoming more apparent. The continued urbanization of Tonga's population, approaching 50 percent of the nation's total, frequently is accomplished at considerable cost to family health and welfare.

146 The traditional food patterns of the Tongan are nutri- 262 tionally balanced. Fruits and root vegetables provide sources of

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

146
262 calories, vitamins and minerals, as do nuts and shellfish. However,
146 this balance in the average Tongan diet has recently undergone
262 significant change. Particularly since World War II, imported
178 cereal products are replacing the traditional vegetables, while
tinned varieties of meat and fish are replacing fresh sources.
146 However, survey results indicated that this dependency upon
262 imported food products is more pronounced in urban areas, especially
369 Nuku'alofa.

146 The history of Tonga, as well as the generalized South Pacific, shows the classical forms of malnutrition to be very uncom-
[757] mon. Accounts of folk medicine reveal very few treatments for the symptoms of malnutrition (Harr'e 1973, p. 86). Similarly, more recent health and nutritional surveys, conducted by the South Pacific Health Service during the 1950s and including those by Langley (1952), and Whiteman (1956), did not note significant nutritional variations between rural and urban populations. However, rapid population expansion in conjunction with the developing of urbanizaton, during the 1960s and 1970s, necessitated a reexamination of Tonga in terms of undernourishment and classic malnutrition. Investigations by Hansell (1962) reported that up to 15 percent of households contacted by the Tongan Service for the Protection of Mothers and Children evidenced some signs of protein-calorie malnutrition (Hansell 1962, p. 288). More recently, Jansen (1973) reported that protein-calorie malnutrition is becoming a more frequent occurrence within Tonga, with 55 cases reported in 1971. Malnutrition was

101: Clark K-4,5 (1974) 1978 OU9 Tonga OU9

Malnutrition was further reported to be the fifth leading cause of death among young in-patients at Vaiola hospital on Tongatapu in 1971 (Jansen 1973, p. 3).

It is probable that borderline malnutrition, or at least undernourishment, has existed in the South Pacific to some degree since the influenza epidemic of 1918. Rapid population growth has been prevalent and unabated since that time. The situation in such urban environments as Nuku'alofa is becoming serious with regard to nutrition and general well-being. The high cost of living and underemployment, aggravated by the overflow of unskilled or semi-skilled laborers, has resulted in a subsequent increase in the number of malnourished children. Foods such as yam, fresh fish and fruits which traditionally were eaten by all Tongans are now, for many families in Nuku'alofa, a luxury beyond their economic means. Money secured through cash cropping, relatives or overseas remittances often is insufficient to support a large urban family and migrating relatives. Jansen (1973) concluded that under prevailing conditions,

> two points must be kept in mind: a. in spite of socio-economic progress, technology, better education, etc., many children in the Pacific Islands actually die because they lack proper food; b. the survivors may be permanently stunted in physical, and possibly mental, development (Jansen 1973, p. 43).

In the present investigation, the incidence of protein malnutrition or undernourishment was of prime interest. Throughout the sample survey, children of preschool age groupings (here defined as 2 years 0 months to 5 years 0 months) were examined. Data presented

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Attributing this condition to the effects of urbanization and continued in-migration from rural areas of Tonga, the prevalent factors of overpopulation, pressure upon domestic agriculture and the continued development of a cash crop economy assume a new significance. Tongan society, already approaching 50 percent urbanization, has reached a critical stage during which the future health and well-being of the population will be determined.

[i.e., the poor nutritional status of urban children--Analyst.]

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CHAPTER VIII

CONCLUSION

Summary

121 The objectives of this research were threefold:

1. To assess alterations in the population profile of Tonga (i.e., natural increase, internal migration and urbanization).

2. To determine the influence of population growth, land tenure and the development of cash cropping upon the agricultural economy of Tonga.

3. To determine the degree to which urbanization has altered the nutrition status of the Tongan people.

Prior to fulfilling the above objectives, it was hypothesized that:

1. Increases in population are accompanied by subsequent increases in (a) pressure upon agricultural lands, (b) population migration, and (c) urbanization.

2. Increases in cash income among agricultural producers are accompanied by subsequent increases in migration to urban areas, and decreases in agricultural production of food crops in ratio to total national population.

3. Increases in urbanization are accompanied by subsequent increases in reliance upon imported foodstuffs, and decreases in domestic food production and nutritional status.

Data acquired during field investigations supported the 121 above hypotheses. A condition of increasing urbanization in Tonga 369 was found to be the result of (1) natural population growth within 161 166 178

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121 urban areas, (2) displaced individuals migrating due to increased
369 population pressure on agricultural land, and (3) migration of
161 those rural individuals with sufficient income from cash cropping
166 enterprises. (The above is summarized within Figure 2).
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178 Despite increases in the absolute quantity of domestic food
121 production, research results indicated that population growth more
241 than nullifies these gains. This situation is aggravated by the withdrawal of acreage from domestic food production resultant from (1) expanded cash cropping, and (2) increasing absentee landholding.
[439] The ensuing gap between population and domestic food needs requires that Tonga import large quantities of foodstuffs (Table 20).A

121 Further investigation revealed that the consequences of
178 urbanization in Tonga are (1) decreased domestic food production
146 per capita, and (2) retarded physical development of preschool
369 children most likely due to inadequate dietary quality, as shown
121 in Table 21, and Table 28 (p.188).B However, in order to strengthen the reliability of the preceding hypotheses, it is recommended that they be tested in relation to alternative societies.

Implications

241 The Tongan social structure and systems of land tenure and agriculture, in combination with expanding urbanization, require that Tongan governmental officials realize the vital role of agriculture in the Tongan economy. To date, the Kingdom lacks any other alternative resources. Thus, care must be taken to stabilize and revitalize agriculture and domestic food production.

A [See Category 457, p. 124--Analyst.]
B [See Category 146, p. 136 and 188--Analyst.]

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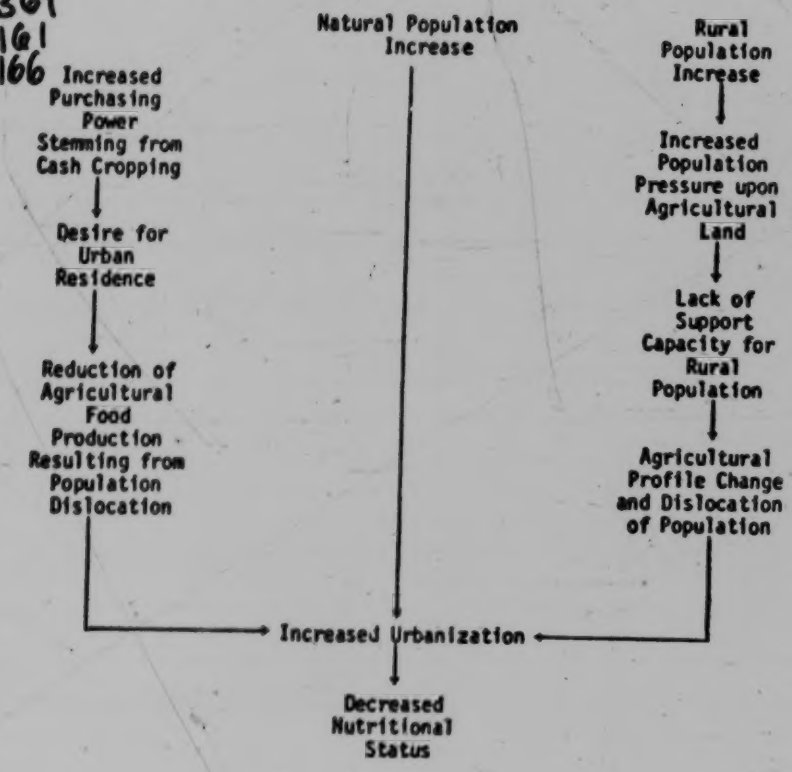
Natural Population Increase
Rural Population Increase
Increased Purchasing Power Stemming from Cash Cropping
Desire for Urban Residence
Reduction of Agricultural Food Production Resulting from Population Dislocation
Increased Population Pressure upon Agricultural Land
Lack of Support Capacity for Rural Population
Agricultural Profile Change and Dislocation of Population
Increased Urbanization
Decreased Nutritional Status

Figure 2.--Urbanization: Kingdom of Tonga